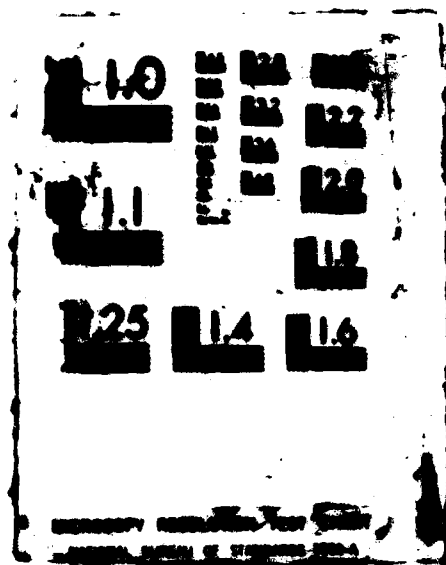
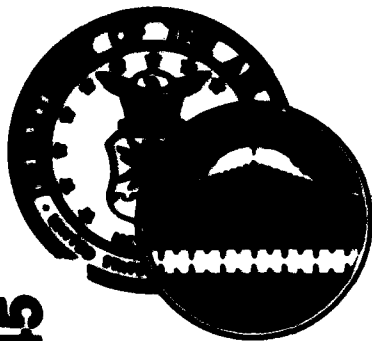


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UNITED STATES AIR FORCE

AD-A187 045

OCCUPATIONAL SURVEY REPORT

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OCT 29 1987
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SURGICAL SERVICES CAREER LADDER

AFSC 902X2

AFPT 90-902-736

SEPTEMBER 1987

OCCUPATIONAL ANALYSIS PROGRAM
USAF OCCUPATIONAL MEASUREMENT CENTER
AIR TRAINING COMMAND
RANDOLPH AFB, TEXAS 78150-5000

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PREFACE

This report presents the results of an Air Force occupational survey of the Surgical Services (AFSC 902X2) career ladder. Authority for conducting specialty surveys is contained in AFR 35-2. Computer products used in this report are available for use by operations and training officials.

Chief Master Sergeant Anthony J. O'Flaherty developed the survey instrument, Ms Olga Velez provided computer programming support, and Mr Richard G. Ramos provided administrative support. Ms Faye Shenk analyzed the data and wrote the final report. This report has been reviewed and approved for release by Lieutenant Colonel Thomas E. Ulrich, Chief, Airman Analysis Branch, Occupational Analysis Division, USAF Occupational Measurement Center.

Copies of this report are distributed to Air Staff sections, major commands, and other interested training and management personnel. Additional copies may be requested from the Occupational Measurement Center, Attention: Chief, Occupational Analysis Division (OMY), Randolph AFB, Texas 78150-5000.

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Chief, Occupational Analysis Division
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Center

SUMMARY OF RESULTS

1. Survey Coverage: The survey was conducted in response to a request from the School of Health Care Sciences (SHCS) to evaluate classification changes made since the last report and assess the revised AFSC 902X2 specialty. The inventory was completed by 920 career ladder members (77 percent of those assigned). These respondents included 769 DAFSC 902X2 personnel, 32 DAFSC 902X2B members, 78 DAFSC 902X2C members, and 42 DAFSC 902X2D personnel. A good representation of the career ladder population was obtained.

2. Career Ladder Structure: Eight major job areas were identified within the AFSC 902X2 career ladder. These job areas are: Operating Room Personnel; ENT and Urology Clinic Personnel; NCOIC, Surgical Services; Orthopedic Clinic Personnel; Clinic NCOICs; Surgical ENT Personnel; Sterile Support Personnel; and NCOIC, Supply. Basic Surgical Services personnel were found primarily within the Operating Room Personnel job. Shred personnel grouped independently based on their unique functional responsibilities.

3. Career Ladder Progression: Three- and 5-skill level personnel are accomplishing the basic technical skills, while the 7-skill level assume a more advisory role in the performance of technical tasks. At the 7-skill level, close to half of their job time involves technical duties, with supervision and administrative responsibilities occupying the remainder of the 7-skill level Surgical Services incumbent's time.

4. Career Ladder Documents: AFR 39-1 Specialty Descriptions generally are accurate; however, they should be reviewed. They do not reflect the amount of time 7-skill level personnel spend on administrative tasks, particularly related to supply functions. Shred-specific paragraphs do not suggest the fact that they spend close to a third of their time performing clinic administrative duties.

5. Training Analysis: The AFSC 902X2 Specialty Training Standard (STS) and the Plan of Instruction (POI) were supported by survey data. The POI had unreferenced tasks which should be reviewed.

6. Implications: The basic Surgical Services career ladder remains stable, with large percentages of personnel performing a common core of technical tasks. Shred personnel divide their time between administration, clinic responsibilities, and operating room support.

AFR 39-1 represents tasks performed by AFSC 902X2 personnel; however, the documents should be reviewed to determine if they sufficiently delineate the full range of tasks performed.

Job satisfaction is consistently high for the career ladders; but write-in comments indicate concerns related to utilization of personnel, particularly in their initial assignment.

**OCCUPATIONAL SURVEY REPORT
SURGICAL SERVICES CAREER LADDER
(AFSC 902X2)**

INTRODUCTION

↙
This is a report of an occupational survey of the Surgical Services career ladder completed by the USAF Occupational Measurement Center in July 1987. The career ladder was previously surveyed in 1979 as part of an Occupational Survey Report which included Operating Room, Ophthalmology Surgical, Otorhinolaryngology Surgical, Urology Surgical, Orthopedic Clinic, and Optometry career ladders (AFSCs 902X2, 912X0, 912X1, 912X3, and 912X5). The current survey was conducted in response to a request from the School of Health Care Sciences (SHCS/MSO) to evaluate classification changes made since the last report and assess the revised AFSC 902X2 specialty. *Questionnaires; Job analysis*
promotion (advancement) —

Background

AFSC 902X2, Operating Room Specialist, was created in 1954. The basic career ladder remained stable through 1981. In 1981, the name of the career ladder was changed to Surgical Services. Additionally, four shreds were added to AFSC 902X2. These shreds included 902X2A, Surgical Services, Ophthalmology; 902X2B Surgical Services, Urology; 902X2C, Surgical Services, Orthopedics; and 902X2D, Surgical Services, Otorhinolaryngology. In 1985, AFSC 902X2A was deleted to form AFSC 912X5A, Optometry Specialist, Ophthalmology. Figure 1 illustrates the changes which have occurred within the career ladder.

According to AFR 39-1, Surgical Services personnel assist the professional nursing staff in providing care for the operative patient. They maintain supplies and equipment in readiness before, during, and after surgery. They assist the surgeon by preparing, maintaining, and controlling sterile supplies and equipment used during an operation.

Personnel assigned to Urology functions (AFSC 902X2B) assist physicians and nurses in the urology clinic and provide surgical assistance in the operating room. They schedule and prepare patients; set up instruments and equipment for urological procedures; take radiographs and develop film for specialized urological roentgenograms; and perform catheterizations.

Orthopedic Clinic personnel (AFSC 902X2C) prepare patients for injections of joints, bursae, and other musculoskeletal areas. They assist the physician in preparing, applying, and removing cast and other orthopedic appliances. They order standard procedure radiograph views and ensure all orthopedic equipment operates properly.

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SURGICAL SERVICES SPECIALTY

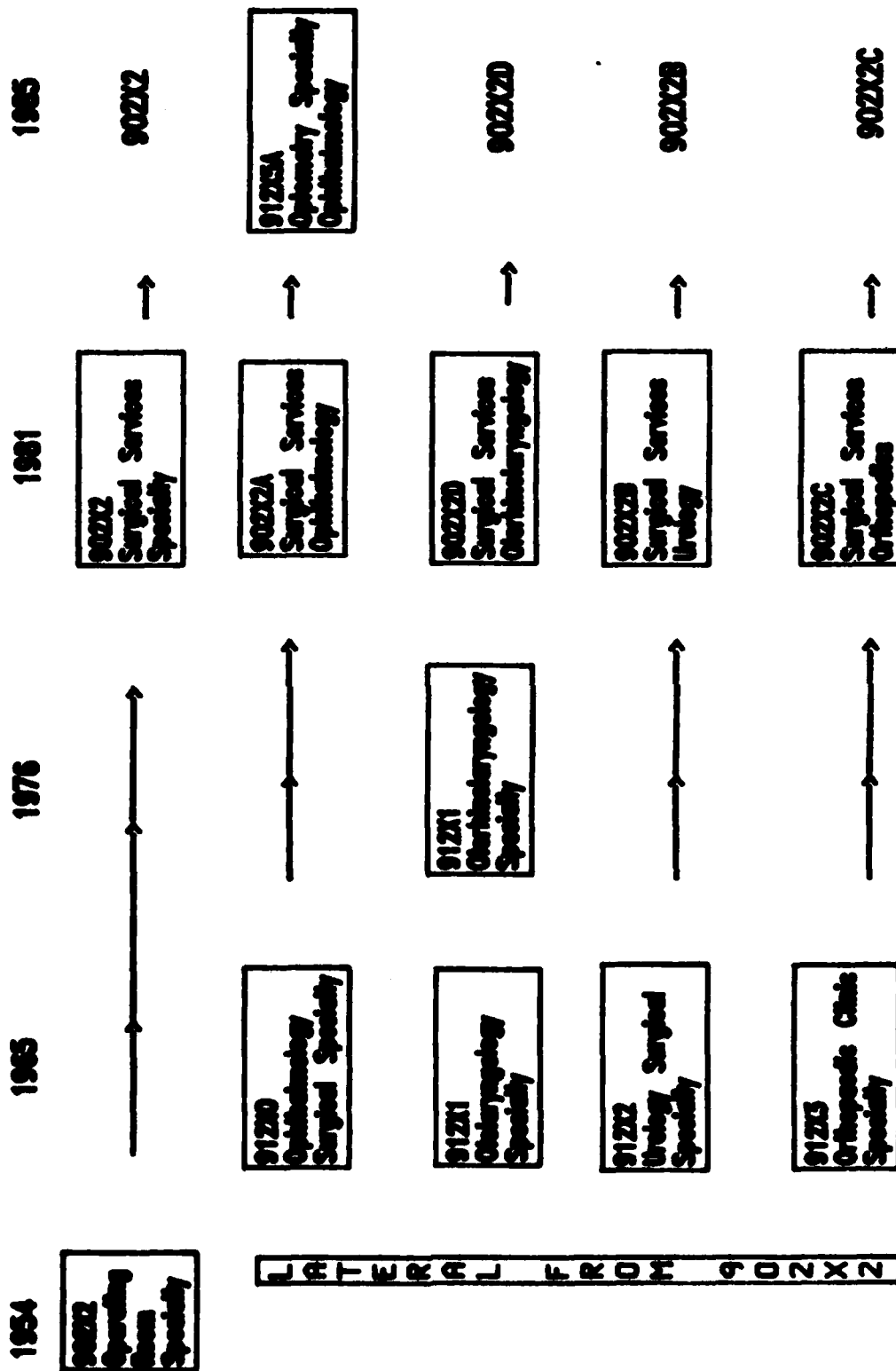


Figure 1

AFSC 902X2D, Otorhinolaryngology personnel, prepare patients for ear, nose, and throat (ENT) examinations and procedures. They perform routine and special otorhinolaryngologic diagnostic evaluations in the ENT clinic and assist otorhinolaryngologists in the operating room. Additionally, they administer local anesthetics to patients under the physician's supervision and perform clinical postoperative patient care. They make periodic user maintenance checks on specialized equipment and perform daily calibration checks on audiology and vestibular laboratory equipment.

Primary entry into the career ladder is through a 10-week resident training course (J3ABR90232) at Sheppard AFB TX. The course covers basic theory and skills of operating room (OR) technology. Emphasis is placed on performance as a surgical scrub or circulating specialist; preparation and sterilization of surgical supplies; care of patient preoperatively, during surgery, and postoperatively; and knowledge of anatomy and physiology.

Personnel selected for Urology or Orthopedic (B- and C-shreds) assignments are designated at the completion of the course based on requirements in the field. Their shred-specific knowledge is obtained through on-the-job training.

The AFSC 902X2D (Otorhinolaryngology) shred personnel are selected about halfway through the basic course. Approximately 12 students a year are selected to attend a Navy course (JABN90232D) at San Diego Naval Air Station. The Navy course is 16 1/2 weeks long, and it prepares students to perform as clinical and surgical assistants to an otorhinolaryngologist. Students learn to maintain and care for specialized otolaryngologic instruments and equipment. They are taught to diagnose and treat common ENT ailments. The course also provides students with practice in the OR, with emphasis on procedures common to this specialty, in audiology, and specialized audiologic tests and procedures. Students also receive instructions on clinic and lab procedures, management, electronystagmography, and caloric stimulation.

SURVEY METHODOLOGY

Data for this survey were collected using job inventory AFPT 90-902-736, dated October 1986. To develop the inventory, pertinent career ladder documents, the previous OSR, and the previous inventory were reviewed. A tentative task list was then validated through personal interviews with subject-matter experts in operational units at the following bases:

<u>BASE</u>	<u>REASON FOR VISIT</u>
Sheppard AFB TX	School of Health Care Sciences
Lackland AFB TX	Wilford Hall Medical Center

F. E. Warren AFB WY	Typical small hospital
Air Force Academy CO	Unique population
Tyndall AFB FL	Typical small hospital
Elgin AFB FL	Regional hospital
Keesler AFB MS	Medical Center
Langley AFB VA	Regional hospital
Andrews AFB MD	Malcolm Grow Medical Center

The resulting inventory listed 526 tasks grouped into 13 duty headings, and a number of background questions asking for information about the duty title, organizational level of assignment, duty AFSC, time in service, time in career ladder, job satisfaction, and equipment used.

Survey Administration

From November 1986 through February 1987, Consolidated Base Personnel Offices in worldwide operational units administered the surveys to 1,116 members of this career ladder. Participants were selected from a computer-generated mailing list provided by the Air Force Human Resources Laboratory.

All individuals who filled out an inventory completed an identification and biographical information section first. Next, they went through the booklet and checked each task performed in their current job. Finally, they went back and rated each task they had checked on a 9-point scale reflecting relative time spent on each task compared to all other tasks. Ratings ranged from 1, which indicated a very small amount of time spent, to 9, which indicated a very large amount of time spent. The relative percent time spent on tasks for each inventory was computed by first totaling all rating values on the inventory. Then the rating for each task was divided by this total and the result multiplied by 100. The percent time spent ratings from all the inventories were combined and used with percent members performing values to describe the various groups in the career ladder.

Survey Sample

Because the career ladder was fairly small, all eligible AFSC 902X2, 902X2B, 902X2C, and 902X2D personnel were asked to complete the survey. Personnel who had not held the DAFSC for at least 6 weeks, had not been working in their present job for at least 6 weeks, or were in PCS status were not considered eligible. For this study, 1,116 DAFSC 902X2 personnel were asked to complete the inventory. Nine hundred twenty respondents were included in the

final sample. This represents 82 percent of those eligible. These respondents included 769 DAFSC 902X2 personnel, 31 DAFSC 902X2B members, 78 DAFSC 902X2C members, and 42 DAFSC 902X2D personnel. Table 1 shows how the sample compared to the actual population of the career ladder in terms of the distribution across MAJCOMS. These data indicate a good representation of the career ladder population in the final survey sample.

Task Factor Administration

Job descriptions alone do not provide sufficient data for making decisions about career ladder documents or training programs. Additional task factor information is needed for a complete analysis of the career ladder. To obtain the needed task factor data, selected senior AFSC 902X2 personnel without a shred completed either a Training Emphasis (TE) or Task Difficulty (TD) booklet. (Because of the small sample sizes, TE and TD data were not collected for the shred personnel.) The TE and TD data were used in several analyses discussed later in this report.

Training Emphasis (TE). Training emphasis is the amount of structured training that first-term DAFSC 902X2 personnel need to successfully perform tasks. Structured training is defined as training provided by resident technical schools, field training detachments (FTD), mobile training teams (MTT), from OJT, or any other organized training method. Twenty-eight Surgical Services personnel without shreds completed TE booklets. They rated all tasks in the inventory on a 10-point scale ranging from no training required (0) to much structured training required (9). Interrater reliability (as assessed through components of variance of standard group means) was .96, which indicates very high agreement among raters.

When TE ratings are used with other information, such as percent members performing and task difficulty, they can provide insight into training requirements and help validate the need for organized training for the career ladder.

Task Difficulty (TD). Task difficulty is defined as the amount of time the average airman needs to learn to do a task satisfactorily. Fifty-four experienced basic AFSC 902X2 personnel rated the difficulty of the tasks in the inventory on a 9-point scale ranging from 1 (easy to learn) to 9 (very difficult to learn). Ratings were adjusted so tasks of average difficulty would have a value of 5.0. Interrater reliability was .92, which indicates good agreement among raters.

SPECIALTY JOBS (Career Ladder Structure)

A USAF occupational analysis begins with an examination of the career ladder structure. This analysis is based on what personnel are doing in the ladder as determined from task responses, in contrast to official career

TABLE 1
COMMAND REPRESENTATION OF AFSC 902X2 SURVEY SAMPLE

<u>COMMAND</u>	<u>PERCENT OF ASSIGNED*</u>		<u>PERCENT OF SAMPLE</u>		
SAC	19		20		
TAC	16		16		
MAC	14		13		
AFSC	13		10		
ATC	12		15		
USAFE	8		9		
AFLC	7		7		
PACAF	3		3		
AAC	2		2		
AFA	2		2		
AU	2		2		
OTHER	2		1		
	<u>902X2</u>	<u>902X2</u>	<u>902X2B</u>	<u>902X2C</u>	<u>902X2D</u>
Total Assigned*	1,246	1,002	55	125	64
Total Number Eligible	1,116	904	46	109	57
Total in Sample	920	769	31	78	42
Percent of Assigned	74%	76%	56%	62%	66%
Percent of Eligible	82%	85%	67%	72%	74%

* As of Sep 86

ladder document definitions of their job. The job structure for the Surgical Services career ladder was determined by performing a job type analysis of 920 survey respondents from the AFSC 902X2 basic career ladder and the AFSC 902X2 shreds.

Based on task similarity and time spent, the jobs performed by Surgical Services personnel divided into eight different jobs (see Figure 2). These jobs are identified below. The group (GRP) number is a reference to computer-printed information. The letter "N" stands for the number of personnel in the group.

- I. OPERATING ROOM PERSONNEL (GRP077, N=632)
 - A. NCOIC, Operating Room (GRP128, N=67)
 - B. Operating Room Assistants (GRP100, N=510)
 - C. Junior Operating Room Assistants (GRP091, N=47)
- II. ENT AND UROLOGY CLINIC PERSONNEL (GRP069, N=63)
 - A. NCOIC, ENT Clinic (GRP176, N=5)
 - B. ENT Assistant, NCOIC (GRP332, N=10)
 - C. NCOIC, Urology Clinic (GRP336, N=17)
 - D. ENT First Enlistment, Assistant NCOIC (GRP164, N=10)
 - E. Urology Assistant, Surgical Services (GRP092, N=6)
 - F. Urology Operating Room, Medical Center Surgical Services (GRP078, N=7)
- III. NCOIC, SURGICAL SERVICES (GRP026, N=56)
 - A. NCOIC, Central Nursing Supply (GRP109, N=15)
 - B. NCOIC, Circulating Technicians (GRP070, N=11)
 - C. NCOIC, Operating Room, Surgical Services (GRP064, N=21)
 - D. NCOIC, Administrative Surgical Services (GRP056, N=6)
- IV. ORTHOPEDIC CLINIC PERSONNEL (GRP052, N=82)
- V. CLINIC NCOICs (GRP088, N=5)
- VI. SURGICAL ENT PERSONNEL (GRP060, N=9)
- VII. STERILE SUPPORT PERSONNEL (GRP068, N=16)
- VIII. NCOIC, SUPPLY (GRP034, N=11)
 - A. Supervisory Supply Personnel (GRP054, N=5)
 - B. Administrative Supply Personnel (GRP149, N=5)

Ninety-five percent of the survey sample are included within these jobs. The remaining 5 percent performed tasks, or a series of tasks, that did not group with any of the defined job types. Some job titles given by these

902X2 CAREER LADDER JOBS

(N=920)

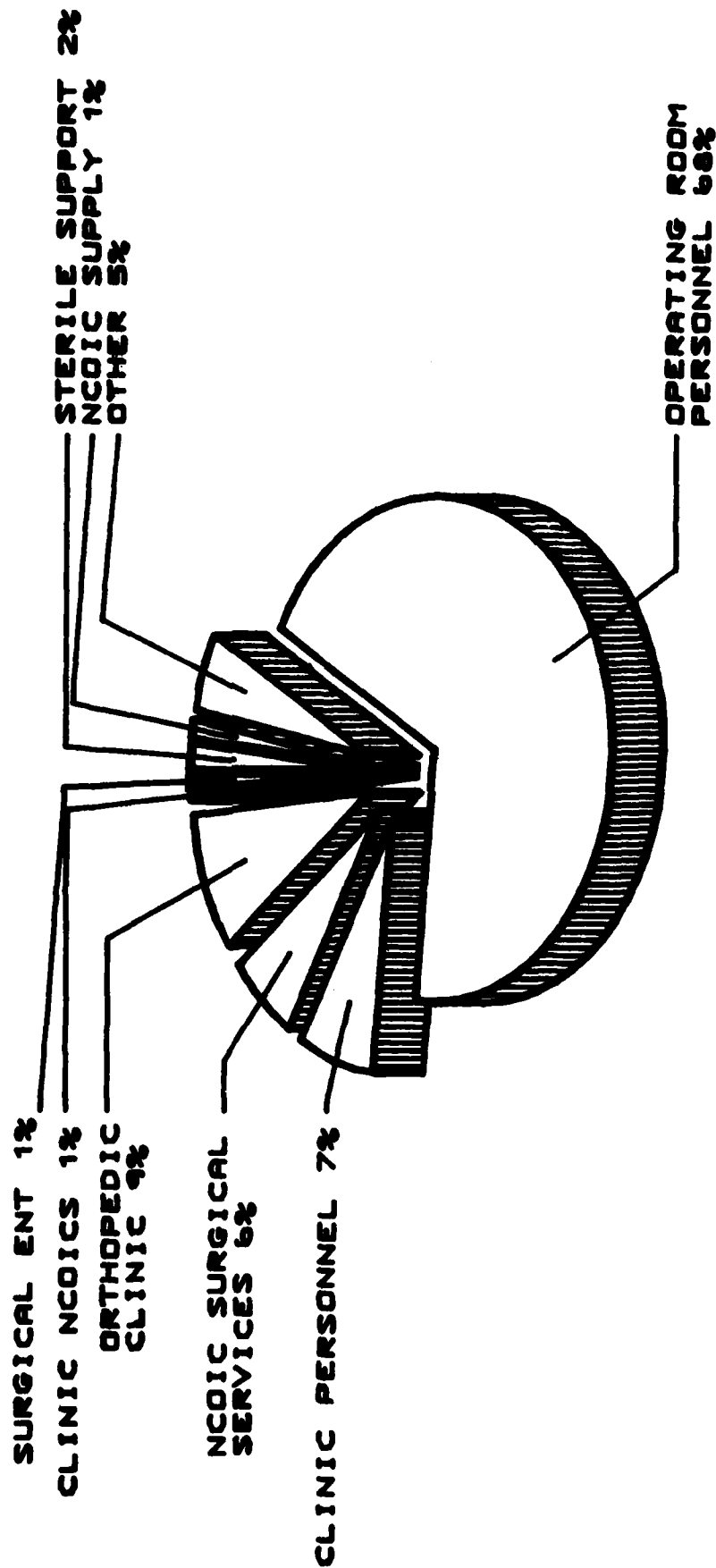


Figure 2

respondents include: Assistant NCOIC, Operations Division; NCOIC, Surgery; Suite Superintendent, Allied Health Department; NCOIC, Training; NCOIC, Anesthesia; and Surgical Supply Custodian.

Job Descriptions

The following paragraphs offer a brief description of each major job area identified in this analysis. Task lists for each major job are given in Appendix A. Selected background information is provided in Table 2 and the relative time members spend in each duty area is shown in Table 3.

I. OPERATING ROOM PERSONNEL (GRP077, N-632). This large group constitutes 68 percent of the survey sample and makes up the core job of the Surgical Services career ladder. As shown in Table 3, three-fourths of their time is spent performing OR procedures or maintaining supplies and equipment (50 percent and 24 percent, respectively).

Members of this group perform the full range of OR personnel tasks described in AFR 39-1. Their job requires completion of duties prior to, during, and after surgery. They maintain supplies, equipment, and facilities for OR procedures. For example, they arrange instruments, sponges, and linens on back tables; open peel-packaged sterile supplies; perform continuous counts of sponges, needles, and instruments used during operations; and handle drugs. They also assist surgeons by preparing and passing materials or equipment and by assisting with surgical procedures, such as holding retractors or dressing incisions. During the operation, they may serve as circulating technician. They most frequently assist in general surgery; however, they also support procedures in specialized areas, such as gynecology, orthopedics, pediatrics, genitourinary, ENT, and plastic surgery. After the operation, they may help with patient postoperative care. At that time, they make sure supplies used during the operation are removed and unused supplies returned. They further complete sterilization of instruments and operating room equipment. Typical tasks for these operating room personnel include:

- prepare and pass instruments to operating surgeons
- don caps, masks, scrubsuits, and shoe covers
- prepare and pass suture materials to operating surgeons
- perform hand and arm scrubs
- arrange instruments, sponges, and linen on back tables
- establish sterile fields in OR
- open peel-packaged sterile supplies
- perform continuous counts of sponges, needles, and instruments used during operations

The majority of these personnel are 5-skill level and average 45 months in the career ladder and 54 months TAFMS. Seventy percent are in their first enlistment; 26 percent are supervisors.

TABLE 2

SELECTED BACKGROUND DATA FOR AFSC 902X2 CAREER LADDER STRUCTURE GROUPS

	OPERATING		ENT AND		NCOIC		ORTHOPEDIC		CLINIC		SURG		STERILE		NCOIC	
	ROOM	PERS	UROLOGY	CLINIC	SVCS	PERSONNEL	NCOICS	ENT	PERS	SPT	PERS	SUP	PERS	SUP	PERS	SUP
NUMBER IN GROUP	632		63		56	82	5	9		16		11				
PERCENT OF TOTAL SAMPLE	68%		7%		6%	9%	1%	1%		2%		1%				
PERCENT IN CONUS	82%		78%		77%	73%	80%	78%		88%		91%				
<u>DAFSC DISTRIBUTION</u> (PERCENT RESPONDING)																
90232	13		8		-	2	-	22		-		-				
90252	74		52		12	56	20	56		88		46				
90272	13		40		88	42	80	22		12		54				
<u>SHRED DISTRIBUTION</u>																
B (UROLOGY)	-		40		-	-	40	-		-		9				
C (ORTHOPEDICS)	-		-		-	89	20	-		-		-				
D (OTORHINOLARYNGOLOGY)	-		38		2	-	40	100		-		-				
AVERAGE GRADE	E3,E4		E3-E6		E5-E7	E4-E6	E7	E3,E4		E3-E5		E4,E5				
AVERAGE MONTHS IN																
CAREER LADDER	45		65		138	82	154	38		57		103				
AVERAGE MONTHS IN SERVICE	54		99		168	116	213	59		62		115				
PERCENT FIRST ENLISTMENT	70%		40%		-	27%	-	56%		69%		9%				
PERCENT SUPERVISING	26%		36%		95%	50%	80%	11%		31%		82%				
AVERAGE NUMBER OF TASKS																
PERFORMED	157		180		120	188	161	87		42		39				

- Indicates less than 1 percent

TABLE 3

AVERAGE PERCENT TIME SPENT ON DUTIES BY CAREER LADDER STRUCTURE GROUPS

	OPERATING ROOM PERS	ENT AND UROLOGY CLINIC PERS	NCOIC SURG SVCS	ORTHOPEDIC CLINIC PERSONNEL	CLINIC NCOICs	SURG ENT PERS	STERILE SPT PERS	NCOIC SUP
A. ORGANIZING AND PLANNING	1	2	11	2	6	1	3	6
B. DIRECTING AND IMPLEMENTING	2	2	15	3	7	2	3	6
C. INSPECTING AND EVALUATING	1	3	12	3	9	1	2	6
D. TRAINING	2	2	12	3	3	1	1	9
E. PERFORMING ADMINISTRATIVE OR MATERIEL PROCEDURES	7	24	14	20	39	30	10	31
F. PERFORMING CLINICAL, DIAGNOSTIC, OR SCREENING FUNCTIONS	7	20	2	42	17	25	1	1
G. PERFORMING STERILE OR NONSTERILE SUPPORT OF OPERATING ROOM PROCEDURES	50	28	16	16	5	32	5	6
H. CLEANING, DISINFECTING, STERILIZING, AND MAINTAINING SUPPLIES AND EQUIPMENT	24	13	15	6	7	5	70	33
I. PERFORMING MISCELLANEOUS NURSING FUNCTIONS	4	4	1	2	5	2	1	-
J. PERFORMING CONTINGENCY TASKS	2	2	3	2	2	1	4	1

- Indicates less than 1 percent

II. ENT AND UROLOGY CLINIC PERSONNEL (GRP069, N=63). These clinic personnel represent 7 percent of the total sample. Most of this group hold a 5- or 7-skill level. They average 65 months in the career ladder and 99 months in the Air Force. Forty percent are in their first enlistment and a little over a third are supervisors. Forty percent are B-shred (Urology) and 38 percent D-shred (ENT). While each shred performs unique functions, ENT and Urology personnel have grouped together based on tasks and time shared in supporting operating room procedures, administrative or materiel procedures, and performing clinical, diagnostic, or screening functions. These personnel are responsible for patient administrative procedures, setting up and assisting with diagnostic procedures, and setting up and assisting in the OR. They perform an average of 180 tasks. Examples of their most time-consuming tasks include:

- schedule patient appointments
- answer patient medical inquiries
- assist surgeons in applying sterile drapes
- make entries on SF Forms 600 (Health Record-Chronological Record of Medical Care)
- prepare sterile set-ups for surgical procedures
- schedule patients for surgery
- don caps, masks, scrubsuits, and shoe covers
- hand instruments to operating surgeons during surgical procedures
- explain clinical policies to patients
- open peel-packaged sterile supplies
- set up and assist physician in diagnostic procedures

Several small jobs were identified based on shred designation. For instance, a group of five D-shred NCOIC ENT Clinic personnel was identified. They average 110 months TICF and average 161 months TAFMS; they are the most senior of the Clinic personnel. Of those groups working as ENT personnel, they appear more involved in training than other groups. They write APRs, supervise OJT, select individuals for specialized training, and schedule specialized training. They also perform shred-specific tasks such as:

- remove foreign bodies from ears using suction, wire loops or alligator forceps
- perform tympanometry
- perform air conduction hearing tests and bone conduction tests
- perform speech discrimination and reception threshold tests

Two other jobs were identified as predominately D-shred. These groups differ basically by level of experience.

As with the ENT personnel, a group of B-shred (Urology) NCOIC personnel was identified. Their average TICF is 78 months and average TAFMS is 130 months. Seventy percent are supervising. These members perform a very wide range of tasks (average is 222). In addition to administrative and supervisory tasks, they also perform shred-specific tasks such as:

- assemble instruments for cystoscopies
- set up and assist physician in diagnostic procedures
- catheterize patients
- instill xylocaine jellies intrauretherally
- perform urodynamic testing (cystomatograms and urine flow)
- shoot kidney-ureter-bladder (KUB) X-rays

Two smaller, more junior jobs were identified. These groups are mixed personnel, some general Surgical Services personnel and some urology specialists. They do not perform any tasks which the NCOIC, Urology personnel do not also perform.

III. NCOIC, SURGICAL SERVICES (GRP026, N=56). The NCOIC, Surgical Services job includes several small groups of NCOICs. As NCOICs, members spend a large portion of their time supervising, establishing work priorities, counseling personnel, writing APRs, participating in staff meetings, preparing daily work schedules, and determining requirements for equipment, space, or supplies. While this group of NCOICs performs many common tasks, there are differences in their positions which create individuality in their jobs. Four subgroups were identified. For instance, several members are serving primarily as NCOIC, Central Nursing Supply. They are more directly involved in supply functions to support OR procedures. Some tasks which make this group distinctive are:

- clean and disinfect thermometers
- inspect microscopic or delicate surgical instruments
- inventory in/outpatient supplies
- make supply deliveries from central supply to using units
- make security checks of syringes and needles
- perform specialized cleaning of delicate equipment
- pick up and deliver supplies
- maintain sanitary field environment
- perform triage

A second subgroup of personnel serves as circulating technicians. Half of these members are assigned to Medical Centers. They are more directly involved in the OR procedures. They spend 40 percent of their time performing sterile or nonsterile support of OR procedures. For example, they:

- obtain wheeled vehicles for patient transport
- operate orthopedic fracture tables
- perform initial and between case germicidal damp wiping
- position and operate audio visual equipment
- remove soiled linen from patients
- return unused supplies to storage areas
- secure dressings
- prepare formulin containers for surgical specimens
- take specimens to laboratories
- adjust electric table height

Members of the next subgroup represent personnel serving as NCOIC, Operating Room and Surgical Services. They generally are assigned to a USAF Hospital. They spend more time on administration than the previous groups, but are still performing technical tasks on a routine basis. These members perform a wider range of tasks than the previous subgroups. Examples of tasks which these members are more likely to perform include:

- participate in USAF Graduate Evaluation Program
- prepare tables, graphs, and diagrams for technical reports
- supervise medical personnel in AFSCs other than 902X2
- evaluate completed special projects, such as self-help
- evaluate security programs
- establish special training requirements
- maintain study references
- perform as Training Advisor
- prepare training aids
- maintain publication libraries
- prepare sterile set-ups for surgical procedures
- change nitrous oxide tanks
- perform postanesthesia care of patients in recovery room under supervision

The last subgroup has been entitled Administrative NCOICs and is the most experienced of the NCOIC groups. They do few technical tasks, spending 74 percent of their time in Duties A-D. They supervise both 5- and 7-skill level personnel, type correspondence or reports, assign personnel, counsel personnel, write APRs, direct maintenance of administrative files, and conduct staff meetings.

IV. ORTHOPEDIC CLINIC PERSONNEL (GRP052, N=82). Eighty-two members (9 percent of the survey sample) relate primarily to the Orthopedics Branch of the career ladder. Eighty-nine percent have a C-shred. These members spend 42 percent of their time performing clinical, diagnostic, or screening functions and 20 percent performing administrative or materials procedures. They spend less time performing sterile support than OR or ENT and Urology Clinic

personnel. As clinic personnel, they perform a wide range of tasks involving patient administration, clinic care, and OR care. Examples of their most time-consuming tasks include:

- apply plaster and fiberglass casts
- remove plaster and fiberglass casts or splints
- brief patients on cast care procedures
- assist doctor in treatment of sprains, strains, contusions, and fractures
- assist doctor in treatment of muscle, tendon, and tendon sheath injuries
- assist doctor in treatment of dislocations and subluxations
- change dressings
- schedule patient appointments
- prepare patients for removal of plaster or fiberglass casts
- prepare casting material
- order x-rays

Orthopedic personnel are 5- and 7-skill level, with an average of 82 months in the career ladder and 116 months in the Air Force. They are more senior than the operating or other clinic personnel. Half of the members are supervising; 28 percent indicate they are the Assistant NCOIC and 35 percent are the NCOIC, Orthopedic Clinic.

V. CLINIC NCOICs (GRPO88, N=5). This group of five NCOICs (1 percent of the survey sample) represents a cross section of the shred personnel in supervisory positions. They spend far more time on administrative or materials procedures than the NCOICs, Surgical Services group, devoting 39 percent of their time to this area. They perform slightly more tasks than the Surgical Services NCOIC members. They are the most senior of the groups identified, with 154 months in the career ladder and 213 months in the Air Force. Most are 7-skill level. Typical tasks include:

- schedule patient appointments
- maintain daily clinic patient logs
- order supplies using shopping guides
- screen patients
- answer patient medical inquiries
- review SF Forms 513 (Medical Record-Consultation Sheet)
- evaluate quality of patient care
- schedule TDY, leaves, or passes

They appear to be more involved in the administration of a clinic, both with patient administration and supply functions, than patient care.

VI. SURGICAL ENT PERSONNEL (GRP060, N=9). These nine members (1 percent of the survey sample) are all D-shred personnel. They perform in the same duties as the previous group of ENT and Urology Clinic personnel; however, they perform fewer tasks and their time is more concentrated on OR procedures. They perform an average of 87 tasks (vs 180 for the Clinic Personnel job). Their most time-consuming tasks include:

- explain clinic policies to patients
- schedule patient appointments
- perform tympanometry
- prepare and pass instruments to operating surgeons
- arrange instruments, sponges, and linen on back tables
- schedule patients for surgery
- don caps, masks, scrubsuits, and shoe covers
- adjust Mayo Stands
- assist surgeons with OR surgical procedures, such as by holding retractors
- prepare and submit daily patient count statistics
- establish sterile fields in OR
- prepare and pass suture materials to operating surgeons

A little over half of this group are 5-skill level. Their average time in the career ladder is 38 months, and 59 months in the service. Five are in their first enlistment, and only 1 indicates a supervisory position. Five of the nine members serve in Regional Hospitals.

VII. STERILE SUPPORT PERSONNEL (GRP068, N=16). This small group of 16 members (2 percent of the sample) spends 70 percent of their time cleaning, disinfecting, sterilizing, and maintaining supplies and equipment. They perform an average of 42 tasks, with 17 tasks occupying 50 percent of their time. Examples of tasks include:

- wrap instrument sets for sterilization
- perform sterilization of items used in patient care areas
- operate sterilizers according to manufacturers instructions
- assemble in-house specialty sets
- prepare linens and instruments for sterilization and disinfection
- perform terminal sterilization of instruments and related materials
- monitor sterilizer effectiveness using thermal indicators
- make supply deliveries from central supply to using units
- damp dust horizontal surfaces, sterile and nonsterile storage areas with germicides
- review expiration dates on sterile instruments, disposable supplies and drugs
- order linen supplies

The majority of these members are 5-skill level. Their paygrade ranges from E-3 to E-5. They average 57 months in the career ladder and 62 months in the service. Sixty-nine percent are in their first enlistment; one-third are supervising. Eleven of the 16 work in Medical Centers. Most do not assist in the operating room.

VIII. NCOIC, SUPPLY (GRP034, N=11). The 11 members of this group spend the greatest proportion of their time with supplies, equipment, and materials procedures. They spend 33 percent of their time cleaning, disinfecting, sterilizing, and maintaining supplies and equipment and 31 percent of their time performing administrative or materials procedures. All are in supervisory positions. They perform a specialized job, averaging 39 tasks. Six of the 11 work in Medical Centers. They average 121 months in the career ladder and 134 months in the service. They are 5- and 7-skill level personnel. Their job time involves such tasks as:

- order medical supplies using local purchase procedures
- prepare shopping guides
- order medical supplies from USAF supply agencies
- maintain supplies, other than medications
- research supply catalogs
- order nonmedical supplies from USAF supply catalogs
- coordinate standard medical supply purchases with medical materiel or vendors
- determine requirements for equipment, space, or supplies

Comparison to Previous Survey

The previous survey for the Surgical Services career ladder combined Operating Room, Ophthalmology Surgical, Otorhinolaryngology Surgical, Urology Surgical, Orthopedic Clinic, and Optometry career ladders (AFSCs 902X2, 912X0, 912X1, 912X2, 912X3, and 912X5). That report was accomplished in 1979. Since that time, the career ladders were restructured and the Otorhinolaryngology Surgical, Urology Surgical, and Orthopedic Clinic AFSCs were added as shreds under AFSC 902X2, Surgical Services. The present inventory includes the basic Surgical Services personnel, as well as shred members.

Table 4 shows a comparison of jobs for the two reports. As in the 1979 and previous reports, basic Surgical Services personnel formed a homogeneous group, entitled Operating Room Personnel, with high percentages of career ladder personnel performing a large number of tasks. Both analyses revealed a group of NCOICs and a group of Surgical Services Assistants within the Operating Room Personnel job.

The 1979 survey showed separate jobs for personnel assigned to Urology, Orthopedic, and Otorhinolaryngology (ENT). In the current analysis, the Urology and ENT personnel merged to form one job. This merger is based primarily on the large number of common tasks involving administration and surgical room procedures. Several smaller specialized groups were identified within the

TABLE 4

COMPARISON OF JOB GROUPS FOR CURRENT AND PREVIOUS SURVEY

1979 REPORT	CURRENT REPORT
OPERATING ROOM PERSONNEL (62%) -----	OPERATING ROOM PERSONNEL (68%)
-----	-----
SMALLER FACILITY ORTHOPEDIC SURGICAL ASSISTANTS (1%)	-----
LARGER FACILITY ORTHOPEDIC SURGICAL ASSISTANTS (2%)	-----
ORTHOPEDIC CLINIC PERSONNEL (6%) -----	ORTHOPEDIC CLINIC PERSONNEL (9%)
-----	-----
UROLOGY SURGICAL ASSISTANTS (3%)	-----
GENERAL UROLOGY ASSISTANTS (1%)	-----
CLINIC-SURGICAL OTORHINOLARYNGOLOGY TECHNICIANS (2%)	ENT & UROLOGY CLINIC PERSONNEL (7%)
-----	-----
OTORHINOLARYNGOLOGY SURGICAL ASSISTANTS (2%)	-----
NCOICs, OTORHINOLARYNGOLOGY CLINIC (2%)	SURGICAL ENT PERSONNEL (1%)
-----	CLINIC NCOICs (1%)
-----	-----
SUPERVISORS (15%) -----	-----
-----	NCOIC SURGICAL SERVICES (6%)
-----	NCOIC SUPPLY (1%)
-----	-----
CENTRAL STERILE SUPPLY PERSONNEL (3%) -----	STERILE SUPPORT PERSONNEL (2%)
TRAINING PERSONNEL (1%) -----	NOT IDENTIFIED AS A SEPARATE JOB

larger job denoting shred-specific tasks. The previous analysis noted a greater distinction between personnel serving in larger facilities and those serving in smaller USAF Hospitals. The largest difference which occurred in the current sample is based on level of experience. The basic tasks, however, appear very closely related between the two time periods. Other job areas were comparable. Training personnel did not group separately in the present study. This may be a function of the type of instruction which involves demonstrating tasks, so the Instructors have basically merged within the larger career ladder structure.

The career ladder and shreds appear to have remained stable within their functional areas.

ANALYSIS OF DAFSC GROUPS

An examination of DAFSC groups, in conjunction with the analysis of the specialty jobs, is an important part of each occupational analysis. The DAFSC analysis reveals similarities and differences among the various skill levels, in relation to the tasks they perform and the relative time spent on particular duties. The information is used to assess the accuracy of career ladder documents, such as the Specialty Descriptions (AFR 39-1) and the Specialty Training Standard (STS), as well as to determine potential training needs.

According to AFR 39-1, AFSC 902X2 personnel assist the nursing staff in providing care for the operative patient. They maintain supplies and equipment required for surgery. In addition, they assist the surgeon by preparing, maintaining, and controlling sterile conditions during an operation. The AFSC also has designed shreds for Urology, Orthopedic, and Otorhinolaryngology functions.

Distribution of the basic surgical services and shred members across career ladder jobs is given in Table 5. Most basic Surgical Services personnel (AFSC 902X2) grouped as Operating Room Personnel. Large percentages of the B-shred and D-shred personnel grouped together in the ENT and Urology Clinic Personnel job. While these shreds perform specialized tasks, they are both very involved in clinic duties. A number of D-shred personnel also were found within the Surgical ENT Personnel job group. Fairly high percentages of both of these shreds did not group with any of the jobs identified, which indicates some diversity within these shreds. Eighty-three percent of the C-shred personnel were identified within the Orthopedic Clinic Personnel job.

As discussed in the Career Ladder Structure analysis, the basic AFSC 902X2 personnel and shred personnel grouped independently and formed separate jobs. Figure 3 shows the relative time spent on the major duties for the basic Surgical Services and each of the shreds: Urology, Orthopedics, and ENT. This figure shows all AFSC 902X2 (basic and shred) personnel share performance of tasks in each of these duties, although they vary in the amount of time spent in various duties and tasks performed. Table 6 lists tasks which are performed by 30 percent or more of each functional area of AFSC 902X2.

TABLE 5
DISTRIBUTION OF BASIC SURGICAL SERVICES AND SHRED MEMBERS
ACROSS CAREER LADDER JOB GROUPS
(PERCENT MEMBERS)*

<u>JOB GROUPS</u>	<u>902X2 (N=769)</u>	<u>902X2B (N=31)</u>	<u>902X2C (N=78)</u>	<u>902X2D (N=42)</u>
I. OPERATING ROOM PERSONNEL	81	-	5	5
II. ENT AND UROLOGY CLINIC PERSONNEL	2	61	-	45
III. NCOIC SURGICAL SERVICES	7	-	-	2
IV. ORTHOPEDIC CLINIC PERSONNEL	1	-	83	-
V. CLINIC NCOICs	-	6	1	5
VI. SURGICAL ENT PERSONNEL	-	-	-	21
VII. STERILE SUPPORT PERSONNEL	-	-	-	-
VIII. NCOIC SUPPLY	1	3	-	-
OTHER (N=46)**	7	29	10	21

- Indicates less than 1 percent

* Columns may not add up to 100 percent due to rounding

** Those incumbents not grouping in any of the above job groups

RELATIVE TIME SPENT ON DUTIES

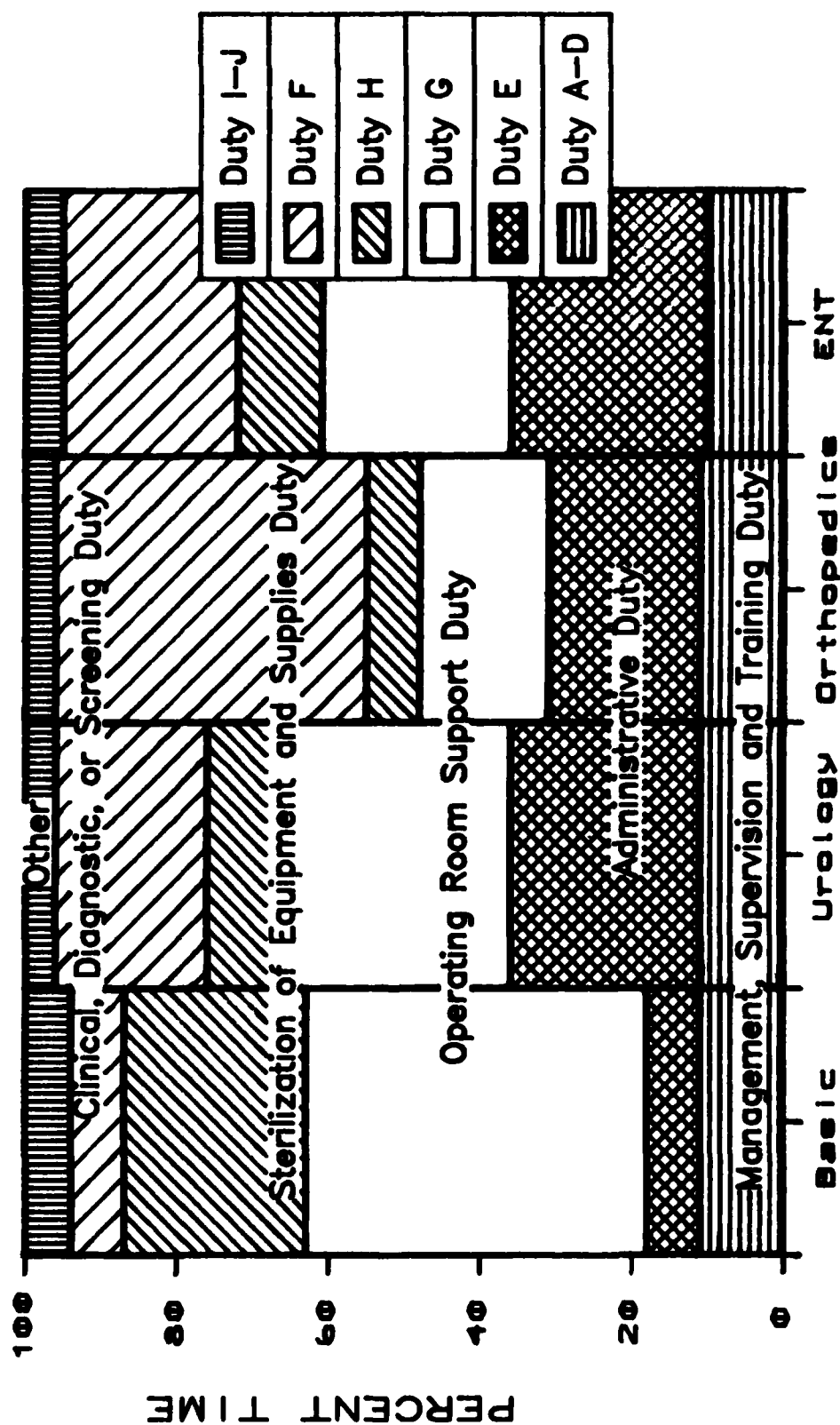


Figure 3

TABLE 6

**COMMON TECHNICAL TASKS FOR BASIC AND SHRED DESIGNATION
SURGICAL SERVICES PERSONNEL
(30 PERCENT OR MORE PERFORMING)**

DUTY TASK	TITLE	BASIC 902X2	902X2 B	902X2 C	902X2 CD
G386	OPEN PEEL-PACKAGED STERILE SUPPLIES	88	87	74	76
G395	PERFORM HAND AND ARM SCRUBS	88	74	71	79
G351	ASSIST SURGEONS IN APPLYING STERILE DRAPES	87	87	78	83
G353	ASSIST SURGEONS WITH OPERATING ROOM (OR) SURGICAL PROCEDURES, SUCH AS BY HOLDING RETRACTORS	87	87	86	83
G412	PREPARE AND PASS INSTRUMENTS TO OPERATING SURGEONS	87	81	55	86
G414	PREPARE AND PASS SUTURE MATERIALS TO OPERATING SURGEONS	87	81	58	81
G426	SELECT SUPPLIES AND INSTRUMENTS FOR SURGERY	87	77	36	62
G430	TRANSFER STERILE ITEMS TO STERILE FIELDS	87	77	53	64
G350	ASSIST STERILE TEAM MEMBERS WITH DOWNING OR REMOVING SURGICAL ATTIRE	86	77	68	81
G385	OPEN PAPER WRAPPED WRAPPERS OF STERILE SUPPLIES	86	84	65	64
G413	PREPARE AND PASS STAPLING DEVICES TO OPERATING SURGEONS	86	74	56	62
G340	ADJUST MAYO STANDS	85	84	47	81
G342	ADJUST OVERHEAD OPERATING LIGHTS	85	81	69	64
G362	DISPOSE OF STERILE GOWNS OR GLOVES	85	74	64	81
G391	PASS SURGERY SPECIMENS TO CIRCULATORS	85	74	55	86
G420	REMOVE LINEN, SPONGES, OR INSTRUMENTS FROM OPERATING AREAS	85	74	50	64
G429	TRANSFER PATIENTS TO OR FROM OPERATING ROOM TABLES	85	65	56	48
G348	ARRANGE INSTRUMENTS, SPONGES, AND LINEN ON BACK TABLES	84	77	50	86
G352	ASSIST SURGEONS IN DRESSING INCISIONS	84	81	82	81
G361	CORRECT BREAKS IN STERILE TECHNIQUE BY MEMBERS OF OPERATING TEAMS	84	71	56	64
H480	REMOVE AND DISPOSE OF SHARPS	84	87	72	79
G371	INSPECT EQUIPMENT FOR CLEANLINESS AND OPERATION	84	77	41	62
G393	PERFORM CONTINUOUS COUNTS OF SPONGES, NEEDLES, AND INSTRUMENTS USED DURING OPERATIONS	83	58	35	69
H481	REVIEW EXPIRATION DATES ON STERILE INSTRUMENTS, DISPOSABLE SUPPLIES, AND DRUGS	83	81	71	76
G411	POSITION STERILE TABLES	82	77	40	57
H451	DISPOSE OF BLOODY SOILED ITEMS	82	58	31	50
G410	POSITION PATIENTS ON OPERATING TABLES	81	77	55	43

TABLE 6 (CONTINUED)

COMMON TECHNICAL TASKS FOR BASIC AND SHRED DESIGNATION
SURGICAL SERVICES PERSONNEL
(30 PERCENT OR MORE PERFORMING)

DUTY TASK	TITLE	BASIC 902X2	902X2 B	902X2 C	902X2 CD
H476	PREPARE INSTRUMENTS FOR CENTRAL SUPPLY	79	71	68	57
H485	VISUALLY CHECK FOR COMPLETENESS OF SURGICAL INSTRUMENT SETS FOR SURGICAL PROCEDURES	79	55	37	60
G382	OBTAIN EQUIPMENT AND SUPPLIES FOR SURGERY	78	61	33	43
G368	HANDLE DRUGS AND SOLUTIONS	77	84	58	76
G347	APPLY STERILE DRESSINGS	76	74	77	64
G387	OPERATE ELECTROSURGICAL APPARATUSES	76	84	38	50
G390	OPERATE SKIN STAPLING DEVICES	76	71	63	43
G402	PERFORM SURGICAL SKIN CLEANSINGS	76	90	47	48
I511	TAKE SPECIMENS TO LABORATORIES	76	84	53	74
G418	PREPARE SURGICAL SPECIMENS FOR FORWARDING TO LABORATORY	75	74	32	50
H484	STORE LOCALLY CLEANED, DISINFECTED, OR STERILIZED ITEMS	75	74	55	62
G370	IDENTIFY DRUGS AND SOLUTIONS	73	68	50	67
G360	CONSULT SCHEDULE OF OPERATIONS	72	68	40	48
G425	SECURE DRESSINGS	72	61	71	55
H482	STORE COMMERCIAL NONSTERILIZED OR PRESTERILIZED ITEMS	72	48	51	43
H483	STORE EQUIPMENT FOR CONVENIENT ACCESSABILITY	72	71	51	57
F321	PREPARE STERILE SET-UPS FOR SURGICAL PROCEDURES	71	97	71	76
G383	OBTAIN WHEELED VEHICLES FOR PATIENT TRANSPORT	62	45	53	31
H459	ORDER LINEN SUPPLIES	62	48	55	43
D101	PARTICIPATE IN EMERGENCY MEDICAL TRAINING, SUCH AS FIRST AID OR CARDIOPULMONARY RESUSCITATION	59	81	62	62
G381	OBTAIN DRUGS FROM PHARMACIES	58	81	64	62
J526	TRANSFER LITTER PATIENTS	56	55	67	52
B32	ORIENT NEWLY ASSIGNED PERSONNEL	55	61	69	50
F259	CHANGE SOLUTIONS DURING SURGICAL PROCEDURES	55	81	32	40
I510	TAKE AND RECORD VITAL SIGNS OF PATIENTS	55	68	46	57
B33	PARTICIPATE IN STAFF MEETINGS	54	71	63	48
E175	PERFORM PERIODIC INVENTORIES OF EQUIPMENT AND SUPPLIES, OTHER THAN DATED MEDICATIONS	54	84	76	74

TABLE 6 (CONTINUED)

**COMMON TECHNICAL TASKS FOR BASIC AND SHRED DESIGNATION
SURGICAL SERVICES PERSONNEL
(30 PERCENT OR MORE PERFORMING)**

DUTY TASK	TITLE	BASIC 902X2	902X2 B	902X2 C	902X2 CD
F307	POSITION PATIENTS FOR DIAGNOSTIC PROCEDURES	54	90	42	55
J515	DON OR DOFF CHEMICAL WARFARE PERSONAL PROTECTIVE CLOTHING	54	55	60	45
J517	LOAD OR UNLOAD PATIENTS ON PATIENT TRANSPORTATION VEHICLES	51	55	54	52
F320	PREPARE SPECIMENS FOR LABORATORY AND PATHOLOGY	51	77	36	69
F309	PREPARE AND DRAPE PATIENTS FOR DIAGNOSTIC PROCEDURES	51	87	59	60
E152	MAKE ENTRIES ON SF FORMS 515 (MEDICAL RECORD - TISSUE EXAMINATION)	49	84	32	64
F308	PREPARE ACCESSORY EQUIPMENT, SUCH AS LAMPS, FOR DIAGNOSTIC PROCEDURES				
E173	PERFORM MAINTENANCE ON INSTRUMENTS USED	49	84	44	62
E172	ORDER SUPPLIES USING SHOPPING GUIDES	47	74	51	55
I512	TAKE X-RAYS TO RADIOLOGY	45	87	74	71
J521	PARTICIPATE IN CHEMICAL WARFARE CONFIDENCE EXERCISES	44	81	62	40
F335	SET UP AND ASSIST PHYSICIAN IN DIAGNOSTIC PROCEDURES	44	55	47	48
E125	MAINTAIN SUPPLIES, OTHER THAN MEDICATIONS	43	90	58	76
A3	DETERMINE REQUIREMENTS FOR EQUIPMENT, SPACE, OR SUPPLIES	43	77	67	81
C61	IDENTIFY SAFETY HAZARDS	42	81	73	57
I502	OBTAIN PATIENTS RECORDS	41	58	59	38
E138	MAKE ENTRIES ON AF FORMS 581 (MEDICAL LINEN SUPPLY RECORD)	40	84	72	69
A4	DEVELOP WORK METHODS	40	52	64	45
E141	MAKE ENTRIES ON DD FORMS 1150 (REQUEST FOR ISSUE OR TURN-IN)	38	58	62	48
H460	ORDER MEDICAL SUPPLIES FORM USAF SUPPLY AGENCIES	38	71	60	55
H461	ORDER MEDICAL SUPPLIES USING LOCAL PURCHASE PROCEDURES	38	65	63	55
B20	CORRECT SAFETY HAZARDS	37	61	59	62
B21	COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED MATTERS	36	58	56	45
B22	DIRECT EQUIPMENT MAINTENANCE OR UTILIZATION	36	55	54	43
H47C	PERFORM SECURITY CHECKS OF SYRINGES AND NEEDLES	36	48	49	50
G378	OBTAIN AND DISTRIBUTE X-RAYS FROM RADIOLOGY DEPARTMENTS	36	42	51	38
A9	ESTABLISH WORK PRIORITIES	35	58	53	36
G406	POSITION AND TRANSPORT PATIENTS IN WHEELCHAIRS	35	48	54	43
I504	PERFORM PATIENT CARE IN MEDICAL EMERGENCIES	35	74	69	45
		35	61	44	48

TABLE 6 (CONTINUED)

COMMON TECHNICAL TASKS FOR BASIC AND SHRED DESIGNATION
SURGICAL SERVICES PERSONNEL
(30 PERCENT OR MORE PERFORMING)

DUTY TASK	TITLE	BASIC 902X2	902X2 B	902X2 C	902X2 CD
J523	PERFORM IMMEDIATE MEDICAL CASUALTY CARE, SUCH AS BASIC CARDIAC LIFE SUPPORT	34	45	37	31
E174	PERFORM PERIODIC INVENTORIES OF DATED MEDICATIONS TO DETERMINE CURRENCY	33	84	82	81
A13	PREPARE DAILY WORK SCHEDULES	32	55	49	50
E180	RETURN PATIENT MEDICAL RECORDS	32	68	73	71
B17	ADVISE SUBORDINATES ON MEDICAL ETHICS	31	48	51	33
H462	ORDER NONMEDICAL SUPPLIES FROM USAF SUPPLY CATALOGS	31	52	51	45

While all Surgical Services personnel perform tasks related directly to OR support, Figure 3 also highlights the differences in the time spent in these areas. The basic Surgical Services personnel spend a much larger portion of their job performing OR support, and performing sterilization of equipment and supplies. Tasks performed by 30 percent or more of the basic personnel, but less than 30 percent of the shred members are shown in Table 7. All of the shred personnel divide their time between direct support for the OR and clinic and administrative duties. Most shred personnel work in a clinic-type situation and share many tasks involving scheduling patients, screening records, and completing forms. Table 8 lists tasks performed by 30 percent or more of each of the shred groups, but less than 30 percent of the basic AFSC personnel. The majority of these tasks are from Duty E, Performing Administrative or Materials Procedures. Each of the members of the shreds also perform unique tasks related to Urology, Orthopedics, or ENT specialties. Tables 9 through 11 present tasks which are uniquely performed by each of the shred groups. Urology personnel spend between 8 and 9 percent of their time on shred-unique tasks; Orthopedic personnel spend 27-28 percent of their time on shred-specific tasks; and ENT personnel spend approximately 11 percent of their time on ENT tasks. Figure 3 shows Urology and ENT personnel spend similar amounts of time on each of the duties, while Orthopedic personnel spend more time on shred-specific tasks within the clinical, diagnostic, or screening duty.

Specific skill levels for the basic AFSC 902X2 and for shred personnel are discussed below. Table 12 shows the relative percent time spent on each duty across skill level groups for the basic AFSC and for each of the shreds. Table 13 shows the types of surgery in which personnel from these groups assist.

AFSC 902X2

DAFSC 90232/90252. A comparison of duty and task performance between 3-skill level and 5-skill level personnel indicates the job they perform is essentially the same; therefore, they are discussed as one group. Three- and 5-skill level personnel represent 79 percent of the basic Surgical Services survey sample. They spend almost half of their job time performing sterile or nonsterile support of OR procedures. An additional 15 percent of their job time involves cleaning, disinfecting, sterilizing, and maintaining supplies and equipment. The remaining time is divided among the other eight duties included in the survey. The most time-consuming tasks involve sterile support functions such as:

- don caps, masks, scrubsuits, and shoe covers
- prepare and pass instruments to operating surgeons
- prepare and pass suture materials to operating surgeons
- perform hand and arm scrubs
- arrange instruments, sponges, and linen on back tables
- stock operating room with sterile and nonsterile supplies

TABLE 7

UNIQUE TASKS PERFORMED BY AFSC 902X2 (BASIC) SURGICAL SERVICE PERSONNEL
(TASKS PERFORMED BY 30 PERCENT OR MORE OF BASIC AFSC
AND LESS THAN 30 PERCENT OF OTHER PERSONNEL)

DUTY TASK	TITLE	BASIC 902X2	902X2 B	902X2 C	902X2 D
G431	TRANSPORT PATIENTS TO AND FROM OR	82	26	14	17
H458	OPERATE STERILIZERS ACCORDING TO MANUFACTURERS INSTRUCTIONS	80	23	9	29
H456	MONITOR STERILIZER EFFECTIVENESS USING BIOLOGICAL INDICATORS	74	16	10	19
H446	CLEAN STEAM STERILIZERS	72	6	9	5
G365	ESTABLISH PATIENT IDENTIFICATION PRE- AND POST-OPERATIVELY	69	26	18	21
G416	PREPARE FOR SEPTIC PROCEDURES	69	29	17	19
G358	CLEAN OR SUPPORT AREAS	68	29	19	21
G404	PERFORM WET VACUUMING OF OR FLOORS	68	26	13	29
G357	CHECK PREOPERATIVE CHECKLISTS PRIOR TO TRANSPORTING PATIENTS TO SURGERY	67	10	10	12
G359	CONSULT DAILY ASSIGNMENT SHEETS	65	13	22	14
H457	MONITOR STERILIZER EFFECTIVENESS USING THERMAL INDICATORS	65	10	10	17
H433	ASSEMBLE IN-HOUSE SPECIALTY SETS	61	26	18	24
H455	MAKE SUPPLY DELIVERIES FROM CENTRAL SUPPLY TO USING UNITS	60	10	10	7
I498	EXPEDITE FROZEN SECTIONS TO LABORATORIES	59	6	9	29
G380	OBTAIN BLOOD FROM BLOOD BANKS	57	10	5	5
G432	VERIFY ENTRIES ARE COMPLETED ON SF FORM 522 PRIOR TO TRANSPORTING PATIENTS TO SURGERY	57	16	10	10
G369	IDENTIFY AND COUNT LINENS FOR REPAIR OR REPLACEMENT	56	26	22	19
G377	MONITOR TRAFFIC FLOW PATTERNS IN OR	55	6	12	21
G394	PERFORM END-OF-DAY CLEANING OF OR FLOORS, WALLS AND FIXTURES	55	26	9	21
H437	CHANGE NITROGEN TANKS	54	10	12	7
G372	INVENTORY GENERAL SURGICAL EQUIPMENT	53	19	10	14
G421	REMOVE PERSPIRATION FROM BROW OF OPERATING TEAM MEMBERS	53	26	21	12
H439	CHANGE OXYGEN (O2) TANKS	52	10	9	19
H438	CHANGE NITROUS OXIDE (N2O) TANKS	50	6	8	7
G349	ASSIST ANESTHETISTS IN PERFORMING ENDOTRACHEAL INTUBATION	46	16	12	14
H469	PERFORM ROUTINE MAINTENANCE INSPECTION OF OR EQUIPMENT	42	26	10	10
B37	SUPERVISE APPRENTICE SURGICAL SERVICE SPECIALISTS (AFSC 90232)	40	23	13	17

TABLE 7 (CONTINUED)

UNIQUE TASKS PERFORMED BY AFSC 902X2 (BASIC) SURGICAL SERVICE PERSONNEL
(TASKS PERFORMED BY 30 PERCENT OR MORE OF BASIC AFSC
AND LESS THAN 30 PERCENT OF OTHER PERSONNEL)

DUTY TASK	TITLE	BASIC 902X2	902X2 B	902X2 C	902X2 D
I505	PERFORM POSTANESTHESIA CARE OF PATIENTS IN RECOVERY ROOMS UNDER SUPERVISION	40	6	6	5
G419	PREPARE WRITTEN PROCEDURE REPORTS DURING OPERATIVE PROCEDURES	39	29	9	10
G403	PERFORM UNSTERILE BLOOD LOSS COUNTS, SUCH AS SPONGE WEIGHT OR SUCTION	38	13	6	14
I499	IDENTIFY OPERATING ROOM FIELD SUPPLIES AND EQUIPMENT	38	16	12	19
H436	CHANGE AGENT TANKS ON ETHYLENE OXIDE (ETO) STERILIZERS	35	3	5	5
B40	SUPERVISE SURGICAL SERVICE SPECIALISTS (AFSC 90252)	34	29	22	17
H468	PERFORM OPERATOR PREVENTIVE MAINTENANCE ON OPERATING ROOM EQUIPMENT	34	16	10	7
H444	CLEAN ETO STERILIZERS	34	3	8	5
I509	START IV SOLUTIONS UNDER SUPERVISION	33	19	9	10
G405	POSITION AND OPERATE AUDIO VISUAL EQUIPMENT	31	10	17	21

TABLE 8

COMMON TASKS PERFORMED BY AFSC 902X2 SHRED PERSONNEL
(30 PERCENT OR MORE PERFORMING)

DUTY TASK	TITLE	BASIC 902X2	902X2 B	902X2 C	902X2 D
F250	ASSIST DOCTOR IN TREATMENT OF TUMORS	29	74	44	45
E179	RESEARCH SUPPLY CATALOGS	29	58	46	45
E116	COORDINATE STANDARD MEDICAL SUPPLY PURCHASES WITH MEDICAL MATERIEL OR VENDORS	28	68	60	64
H478	PREPARE SHOPPING GUIDES	28	52	37	50
J522	PERFORM DECONTAMINATION PROCEDURES FOR CHEMICAL WARFARE	27	42	31	36
E139	MAKE ENTRIES ON AF FORMS 601 (EQUIPMENT ACTION REQUEST)	26	61	51	52
E167	MAKE ENTRIES ON SF FORMS 553 (MICROBIOLOGY I)	26	81	79	76
E183	REVIEW AND SIGN USING ACTIVITY ISSUE/TURN IN LISTS	26	55	56	43
H463	ORDER NONMEDICAL SUPPLIES USING LOCAL PURCHASE PROCEDURES	26	48	51	48
C54	EVALUATE NEW EQUIPMENT	25	48	42	38
E129	MAKE ENTRIES ON AF FORMS 2005 (ISSUE/TURN IN REQUEST)	24	68	56	57
E142	MAKE ENTRIES ON DD FORMS 1348-6 (DOD SINGLE LINE ITEM REQUISITION SYSTEM DOCUMENT - MANUAL)	24	42	36	45
E176	PICK UP DAILY CLINIC ADMINISTRATIVE DISTRIBUTION	24	87	82	74
F190	ANSWER PATIENT MEDICAL INQUIRIES	24	84	79	83
E115	COORDINATE SPECIAL EQUIPMENT PURCHASES WITH MEDICAL MATERIEL OR VENDORS	23	52	50	48
E169	MAKE ENTRIES ON SF FORMS 557 (MISCELLANEOUS)	23	81	81	74
E188	TYPE CORRESPONDENCE OR REPORTS	23	39	40	45
E168	MAKE ENTRIES ON SF FORMS 554 (MICROBIOLOGY II)	22	65	58	52
A7	ESTABLISH PERFORMANCE STANDARDS	21	52	41	31
C63	INITIATE REPORTS ON UNSATISFACTORY EQUIPMENT	21	48	40	40
E161	MAKE ENTRIES ON SF FORMS 546 (CHEMISTRY I)	21	81	82	74
E162	MAKE ENTRIES ON SF FORMS 547 (CHEMISTRY II)	21	74	71	62
H464	ORDER PHARMACY SUPPLIES	19	68	73	79
I495	CONDUCT MINOR SURGICAL CLINICS	19	32	31	38
A16	SCHEDULE TDY, LEAVES, OR PASSES	18	55	45	33
B23	DIRECT MAINTENANCE OF ADMINISTRATIVE FILES	18	39	41	43
E163	MAKE ENTRIES ON SF FORMS 548 (CHEMISTRY III (URINE))	18	81	58	36
E165	MAKE ENTRIES ON SF FORMS 550 (URINALYSIS)	18	77	87	81

TABLE 8 (CONTINUED)

COMMON TASKS PERFORMED BY AFSC 902X2 SHRED PERSONNEL
(30 PERCENT OR MORE PERFORMING)

DUTY TASK	TITLE	BASIC 902X2	902X2 B	902X2 C	902X2 D
F258	CHANGE DRESSINGS	18	58	96	83
E156	MAKE ENTRIES ON SF FORMS 519A (RADIOLOGIC CONSULTATION REQUEST/ REPORT)	17	74	85	62
E164	MAKE ENTRIES ON SF FORMS 549 (HEMOTOLOGY)	17	77	82	83
E123	MAINTAIN PROPERTY CUSTODIAN LOG BOOKS	16	45	50	52
E113	COLLECT STATISTICAL DATA, OTHER THAN DAILY PATIENT COUNT STATISTICS	16	45	33	33
F189	ADMINISTER TOPICAL LOCAL ANESTHETICS	15	77	31	52
F262	CLEAN CLINIC EXAMINING AND TREATMENT ROOMS	15	84	73	83
F330	REMOVE SKIN STAPLES	15	61	95	67
F331	SCHEDULE PATIENTS FOR SURGERY	15	74	91	90
E117	EXPLAIN CLINICAL POLICIES TO PATIENTS	15	87	85	95
C56	EVALUATE QUALITY OF PATIENT CARE	15	45	41	36
E181	REVIEW AND SIGN CUSTODIAL ACTION LISTS (CAL)	14	39	42	36
A5	ESTABLISH INFECTION CONTROL PROCEDURES	14	45	44	33
E158	MAKE ENTRIES ON SF FORMS 522 (MED RECORD - REQ FOR ADMIN OF ANESTHESIA AND FOR PERF OF OPNS AND OTHER PROCEDURES)	12	61	38	48
E166	MAKE ENTRIES ON SF FORMS 551 (SEROLOGY)	12	74	78	79
E187	SCHEDULE PATIENT APPOINTMENTS	12	94	95	98
F323	REFER PATIENTS TO OTHER CLINICS	11	58	64	60
E184	REVIEW PATIENT HISTORY FORMS	11	32	32	40
E177	PREPARE AND SUBMIT DAILY PATIENT COUNT STATISTICS	10	77	82	81
E122	MAINTAIN DAILY CLINIC PATIENT LOGS	10	84	71	79
E121	MAINTAIN CLINIC FORMS LEVELS	10	77	54	76
F289	PERFORM DAILY PATIENT COUNTS	9	58	64	76
E185	REVIEW PATIENT MEDICAL RECORDS PRIOR TO APPOINTMENT	9	77	83	67
E170	MAKE ENTRIES ON SF FORMS 600 (HEALTH RECORD-CHRONOLOGICAL RECORD OF MEDICAL CARE)	9	81	88	81
F332	SCREEN PATIENTS	7	71	71	67
I496	COUNSEL PATIENTS	7	65	54	43
C47	EVALUATE CLINIC REQUIREMENTS FOR PERSONNEL AND EQUIPMENT	7	61	42	43
E118	FILE CLINICAL LABORATORY REPORTS	7	71	46	71

TABLE 8 (CONTINUED)

COMMON TASKS PERFORMED BY AFSC 902X2 SHRED PERSONNEL
(30 PERCENT OR MORE PERFORMING)

DUTY TASK	TITLE	BASIC 902X2	902X2 B	902X2 C	902X2 D
E186	REVIEW SF FORMS 513 (MEDICAL RECORD-CONSULTATION SHEET)	6	74	79	86
E136	MAKE ENTRIES ON AF FORMS 555 (PATIENT VISIT REGISTER)	6	58	72	69
E151	MAKE ENTRIES ON SF FORMS 513 (MEDICAL RECORD - CONSULTATION SHEET)	6	58	55	60
E137	MAKE ENTRIES ON AF FORMS 560 (ADMISSION AUTHORIZATION AND TREATMENT STATEMENT)	5	77	65	67
E135	MAKE ENTRIES ON AF FORMS 490 (MEDICAL/DENTAL APPOINTMENT)	5	74	53	62
E114	COORDINATE INTRA- OR INTERHOSPITAL APPOINTMENTS FOR OUTPATIENT CONSULTATIONS WITH OTHER MEDICAL FACILITIES	5	55	62	62
F333	SCREEN RECORDS FOR PATIENT FOLLOW-UP	4	74	85	60
F256	BRIEF PHYSICIAN ON PATIENT FOLLOW-UPS	4	52	81	40
E143	MAKE ENTRIES ON DD FORMS 2161 (REFERRAL FOR CIVILIAN MEDICAL CARE)	4	71	41	40
E157	MAKE ENTRIES ON SF FORMS 520 (CLINICAL RECORD ELECTROCARDIOGRAPHIC RECORD)	3	68	50	38

TABLE 9

UNIQUE TASKS PERFORMED BY AFSC 902X28, UROLOGY, PERSONNEL
(TASKS PERFORMED BY 30 PERCENT OR MORE OF THE B-SHRED
AND LESS THAN 30 PERCENT OF THE OTHER PERSONNEL)

DUTY TASK	TITLE	BASIC 902X2	902X2 B	902X2 C	902X2 D
F235	ASSEMBLE INSTRUMENTS FOR CYSTOSCOPES	24	94	8	2
F275	INSTILL XYLOCAINE JELLIES INTRAUTERALLY	5	90	5	2
F306	PERFORM URODYNAMIC TESTING (CYSTOMETROGRAMS & URINE FLOW)	2	90	4	2
F284	OBTAIN URINE SPECIMENS FROM MALE PATIENTS	14	87	9	5
F334	SET TECHNIQUES FOR X-RAY EXPOSURES	2	87	8	2
F337	SHOOT KIDNEY-URETER-BLADDER (KUB) X-RAYS	2	87	4	2
G343	ADJUST UROLOGY EXAM TABLE HEIGHT AND POSITION	16	84	6	5
F277	LABEL X-RAY FILMS	3	81	10	2
E127	MAKE ENTRIES ON AF FORMS 1302 (REQUEST AND CONSENT FOR STERILIZATION)	10	77	22	19
F267	DEVELOP X-RAY FILMS	3	77	5	2
F297	PERFORM ROUTINE URINALYSIS OR CENTRIFUGE SPECIMENS	2	74	4	5
F283	OBTAIN CATHETERIZED URINE SPECIMENS FROM FEMALE PATIENTS	17	65	5	5
I487	ADMINISTER INJECTABLE MEDICATIONS AND IMMUNIZATIONS TO PATIENTS	6	65	22	12
E155	MAKE ENTRIES ON SF FORMS 518 (MEDICAL RECORD - BLOOD OR BLOOD COMPONENT TRANSFUSION)	7	55	29	14
E160	MAKE ENTRIES ON SF FORMS 541 (MEDICAL RECORD - GYNECOLOGIC CYTOLOGY)	6	48	8	19
F274	INJECT CONTRAST MEDIA, SUCH AS DYES OR FLUORESCIN, UNDER PHYSICIANS DIRECTION	13	45	5	5
F264	CLEAN X-RAY DEVELOPING MACHINES	5	39	4	2
B29	INITIATE PERSONNEL ACTION REQUESTS, SUCH AS AF FORMS 2095 (ASSIGNMENT/PERSONNEL ACTION)	14	32	22	19
F295	PERFORM MINOR MAINTENANCE ON X-RAY EQUIPMENT	1	32	4	2
I506	PRACTICE OR PERFORM INPATIENT CARE UNDER FIELD CONDITIONS	22	32	23	17

TABLE 10

UNIQUE TASKS PERFORMED BY AFSC 902X2C, ORTHOPEDIC, PERSONNEL
(TASKS PERFORMED BY 30 PERCENT OR MORE OF THE C-SHRED
AND LESS THAN 30 PERCENT OF THE OTHER PERSONNEL)

DUTY TASK	TITLE	BASIC 902X2	902X2 B	902X2 C	902X2 D
F221	APPLY SHORT ARM PLASTER AND FIBERGLASS CASTS	5	0	100	2
F222	APPLY SHORT ARM PLASTER AND FIBERGLASS SPLINTS	5	0	100	2
F328	REMOVE PLASTER AND FIBERGLASS CASTS	7	0	100	10
F329	REMOVE PLASTER AND FIBERGLASS SPLINTS	7	0	100	10
F205	APPLY LONG ARM PLASTER AND FIBERGLASS SPLINTS	5	0	99	2
F207	APPLY LONG LEG CYLINDER PLASTER AND FIBERGLASS CASTS	4	0	99	2
F224	APPLY SHORT LEG PLASTER AND FIBERGLASS CASTS	5	0	99	2
F227	APPLY STANDARD LONG ARM PLASTER AND FIBERGLASS CASTS	4	0	99	2
F225	APPLY SHORT LEG PLASTER AND FIBERGLASS SPLINTS	4	0	97	2
F228	APPLY STANDARD SHORT ARM PLASTER AND FIBERGLASS CASTS	3	0	97	2
F220	APPLY SHORT ARM NAVICULAR PLASTER AND FIBERGLASS CASTS	3	0	96	2
F248	ASSIST DOCTOR IN TREATMENT OF SPRAINS, STRAINS AND CONTUSIONS	11	0	96	2
F255	BRIEF PATIENTS ON CAST CARE PROCEDURES	4	0	96	5
F206	APPLY LONG ARM SUGAR TONG PLASTER AND FIBERGLASS SPLINTS	3	0	95	2
F208	APPLY LONG LEG PLASTER AND FIBERGLASS CASTS	5	0	95	2
F209	APPLY LONG LEG PLASTER AND FIBERGLASS SPLINTS	4	0	95	2
F223	APPLY SHORT ARM SUGAR TONG PLASTER AND FIBERGLASS SPLINTS	3	0	94	2
F240	ASSIST DOCTOR IN TREATMENT OF DISLOCATIONS AND SUBLUXATIONS	21	0	94	5
F204	APPLY LONG ARM NAVICULAR PLASTER AND FIBERGLASS CASTS	3	0	92	2
F202	APPLY LONG ARM CYLINDER PLASTER AND FIBERGLASS CASTS	4	0	91	2
F317	PREPARE PATIENTS FOR REMOVAL OF PLASTER OR FIBERGLASS CASTS	8	0	91	7
F203	APPLY LONG ARM HANGING PLASTER AND FIBERGLASS CASTS	4	0	88	2
F251	ASSIST DOCTOR IN TREATMENT OF WOUNDS TO JOINTS	25	3	88	5
F249	ASSIST DOCTOR IN TREATMENT OF TRAUMATIC JOINT AFFECTIONS	14	0	87	7
F237	ASSIST DOCTOR IN TREATMENT OF ACUTE JOINT INFECTIONS	15	0	86	2
F314	PREPARE PATIENTS FOR APPLICATION OF PLASTER OR FIBERGLASS CASTS	14	0	86	12
F315	PREPARE PATIENTS FOR INJECTION OF JOINTS, BURSAE, AND OTHER MUSCULOSKELETAL AREAS	7	0	85	5
F201	APPLY HIP SPICA PLASTER AND FIBERGLASS CASTS	3	0	82	2
F241	ASSIST DOCTOR IN TREATMENT OF FASCIA AND BURSAE INJURIES	23	0	79	5

TABLE 10 (CONTINUED)

UNIQUE TASKS PERFORMED BY AFSC 902X2C, ORTHOPEDIC, PERSONNEL
(TASKS PERFORMED BY 30 PERCENT OR MORE OF THE C-SHRED
AND LESS THAN 30 PERCENT OF THE OTHER PERSONNEL)

DUTY TASK	TITLE	BASIC 902X2	902X2 B	902X2 C	902X2 D
F193	APPLY BALANCED SUSPENSION WITH SKELETAL TRACTION DEVICES	4	0	77	2
F318	PREPARE PATIENTS FOR TRACTION APPLICATION	5	0	77	2
F194	APPLY BALANCED SUSPENSION WITH SKIN TRACTION DEVICES	4	0	76	2
F253	ASSIST DOCTOR WITH TREATMENTS REQUIRING ARTHROPLASTY	26	0	76	2
F254	ASSIST WITH AND APPLY SUPPORTIVE CORRECTIVE DEVICES (BRACES)	9	0	76	2
F197	APPLY BUCK'S TRACTION DEVICES	2	0	74	2
F195	APPLY BODY JACKET PLASTER AND FIBERGLASS CASTS	4	0	71	2
F210	APPLY LOWER LIMB SUSPENSION WITH TRACTION DEVICES	3	0	69	2
F252	ASSIST DOCTOR WITH TREATMENTS REQUIRING ARTHRODESIS	11	0	64	2
F213	APPLY PELVIC TRACTION DEVICES	2	0	58	2
F229	APPLY THOMAS SPLINT AND PEARSON ATTACHMENT TRACTION DEVICES	2	0	58	2
F239	ASSIST DOCTOR IN TREATMENT OF CONGENITAL ANOMALIES	13	29	55	12
F196	APPLY BRYANT'S TRACTION DEVICES	2	0	50	2
F212	APPLY PEARSON ATTACHMENT WITH KNEE MOTION TRACTION DEVICES	2	0	49	2
F226	APPLY SHOULDER SPICA PLASTER AND FIBERGLASS CASTS	2	0	49	2
F230	APPLY UPPER LIMB SUSPENSION TRACTION DEVICES	2	0	47	2
F217	APPLY RUSSEL'S SKIN TRACTION DEVICES	1	0	46	2
F244	ASSIST DOCTOR IN TREATMENT OF NERVOUS SYSTEM INJURIES	12	0	45	10
F245	ASSIST DOCTOR IN TREATMENT OF PERIPHERAL NERVE INJURIES	10	0	44	5
F198	APPLY CERVICAL HALTER TRACTION DEVICES	2	0	42	2
F218	APPLY RUSSEL'S SPLIT TRACTION DEVICES	2	0	41	2
D80	DEVELOP IN-SERVICE TRAINING PLANS	18	26	40	21
D90	IMPLEMENT TRAINING PROGRAMS, SUCH AS IN-SERVICE TRAINING PROGRAMS	15	26	40	19
F215	APPLY RIGHT ANGLE SKELETAL TRACTION DEVICES	1	0	40	2
F199	APPLY CERVICAL SKELETAL TRACTION DEVICES	2	0	38	2
D108	SUPERVISE OJT	21	19	37	19
F216	APPLY RIGHT ANGLE SKIN TRACTION DEVICES	2	0	37	2
F238	ASSIST DOCTOR IN TREATMENT OF ANKYLOSING DEFORMITIES	5	0	37	2
F247	ASSIST DOCTOR IN TREATMENT OF POSTURAL DEFORMITIES	6	0	37	2
D77	COUNSEL TRAINEES ON TRAINING PROGRESS	29	29	36	21

TABLE 10 (CONTINUED)

UNIQUE TASKS PERFORMED BY AFSC 902X2C, ORTHOPEDIC, PERSONNEL
(TASKS PERFORMED BY 30 PERCENT OR MORE OF THE C-SHRED
AND LESS THAN 30 PERCENT OF THE OTHER PERSONNEL)

DUTY TASK	TITLE	BASIC 902X2	902X2 B	902X2 C	902X2 D
B26	IMPLEMENT SAFETY PROGRAMS	15	26	33	26
B39	SUPERVISE MEDICAL PERSONNEL IN AFSCs OTHER THAN AFSC 902X2	13	26	33	10
C52	EVALUATE JOB DESCRIPTIONS	14	26	33	21
D88	EVALUATE TRAINING METHODS	17	19	33	10
F231	APPLY VELPEAU PLASTER AND FIBERGLASS CASTS	2	0	33	2
A12	PREPARE BRIEFINGS	23	19	32	10
D71	ASSIGN ON-THE-JOB TRAINING (OJT) TRAINERS	16	10	32	19
F200	APPLY DUNLOP TRACTION DEVICES	2	0	32	2
A2	ASSIGN SPONSORS FOR NEW PERSONNEL	17	13	31	24
B36	ROTATE DUTY ASSIGNMENTS OF PERSONNEL	26	23	31	19

TABLE 11

UNIQUE TASKS PERFORMED BY DAFSC 902X2D, ENT, SURGICAL SERVICES PERSONNEL
(TASKS PERFORMED BY 30 PERCENT OR MORE OF THE D-SHRED PERSONNEL
AND LESS THAN 30 PERCENT OF OTHER PERSONNEL)

DUTY TASK	TITLE	BASIC 902X2	902X2 B	902X2 C	902X2 D
F287	PERFORM AIR CONDUCTION HEARING TESTS	2	0	4	90
F288	PERFORM BONE CONDUCTION TESTS	2	0	4	90
F305	PERFORM TYMPANOMETRY	2	0	4	90
F325	REMOVE FOREIGN BODIES FROM EARS USING ALLIGATOR FORCEPS	3	0	4	90
F326	REMOVE FOREIGN BODIES FROM EARS USING SUCTION	4	0	4	90
F327	REMOVE FOREIGN BODIES FROM EARS USING WIRE LOOPS	3	0	4	88
F300	PERFORM SPEECH DISCRIMINATION TESTS	2	0	4	81
F301	PERFORM SPEECH RECEPTION THRESHOLD (SRT) TESTS	2	0	4	81
F293	PERFORM HILGER NERVE STIMULATIONS	2	0	5	79
F296	PERFORM ROUTINE EAR EXAMINATIONS WITH OTOSCOPE	2	0	4	76
F303	PERFORM THROAT CULTURES	6	26	18	76
F324	REMOVE FOREIGN BODIES FROM EARS BY IRRIGATIONS	2	0	4	74
F263	CLEAN MASTOID CAVITIES	2	0	4	60
F298	PERFORM SCHIRMER'S TESTS	2	0	4	60
F294	PERFORM ICE-WATER/CALORIC TESTS	2	0	4	55
F302	PERFORM STENGER TESTS	2	0	4	45
F280	MAKE EAR MOLD IMPRESSIONS	1	0	4	43
F316	PREPARE PATIENTS FOR LARYNGEAL EXAMINATIONS	5	0	5	40
F272	FIT HEARING AIDS	1	0	4	38
F336	SET UP AND RELEASE DAILY CLINIC SCHEDULES ON COMPUTERS	2	23	18	36
F269	DISTRIBUTE DEVELOPED PHOTOGRAPHS AND SLIDES TO PHYSICIANS	5	13	8	33
A6	ESTABLISH ORGANIZATIONAL POLICIES	14	29	28	31
B25	IMPLEMENT COST-REDUCTION PROGRAMS	15	23	28	31
E132	MAKE ENTRIES ON AF FORMS 3066 (DOCTOR'S ORDERS)	3	16	19	31
F191	APPLY ALUMINUM NASAL SPLINTS	3	0	5	31
F304	PERFORM TONE DECAY HEARING TESTS	2	0	4	31

TABLE 12

AVERAGE PERCENT TIME SPENT IN DUTIES BY DAFSC GROUPS*

	<u>902X2</u>		<u>902X2B</u>		<u>902X2C</u>		<u>902X2D</u>	
	3/5 (N=611)	7 (N=158)	3/5 (N=13)	7 (N=18)	3/5 (N=47)	7 (N=31)	3/5 (N=27)	7 (N=15)
A. ORGANIZING AND PLANNING	1	7	1	3	2	4	1	3
B. DIRECTING AND IMPLEMENTING	2	9	2	3	2	5	2	4
C. INSPECTING AND EVALUATING	1	7	2	5	2	5	2	5
D. TRAINING	2	9	1	3	2	5	1	4
E. PERFORMING ADMINISTRATIVE OR MATERIEL PROCEDURES	6	12	21	28	19	20	24	29
F. PERFORMING CLINICAL, DIAGNOSTIC, OR SCREENING FUNCTIONS	7	5	22	18	42	38	23	23
G. PERFORMING STERILE OR NONSTERILE SUPPORT OF OPERATING ROOM PROCEDURES	49	29	31	21	19	13	29	18
H. CLEANING, DISINFECTING, STERILIZING, AND MAINTAINING SUPPLIES AND EQUIPMENT	25	17	12	13	7	6	12	9
I. PERFORMING MISCELLANEOUS NURSING FUNCTIONS	4	3	6	5	3	2	4	2
J. PERFORMING CONTINGENCY TASKS	2	2	2	1	2	2	2	2

* Columns may not add up to 100 percent due to rounding

TABLE 13

TYPE OF SURGERY ASSISTED SHOWN FOR BASIC SURGICAL SERVICES AND
SHARED PERSONNEL BY SKILL LEVEL
(PERCENT ASSISTING AT LEAST ONCE A MONTH)

TYPE OF SURGERY	BASIC SURGICAL SERVICES			UROLOGY		ORTHOPEDICS		ENT	
	3	5	7	3/5	7	3/5	7	3/5	7
EAR, NOSE, AND THROAT (ENT)	44	36	16	0	0	2	3	84	80
EYE, EAR, NOSE AND THROAT (EENT)	36	28	9	0	0	0	3	3	0
GENERAL SURGERY	93	83	61	0	0	2	3	7	0
GENITAL URINARY (GU)	47	40	17	85	89	0	3	0	0
GYNECOLOGY	88	75	51	0	6	2	3	4	0
MAXILLOFACIAL	17	16	6	0	0	0	3	7	7
NEUROSURGERY	19	12	7	0	0	0	3	0	0
OPEN HEART	3	4	2	0	0	0	3	0	0
ORAL	24	18	6	0	0	0	3	0	0
ORTHOPEDICS	68	60	33	0	0	92	74	7	0
PEDIATRICS	53	42	16	0	0	2	3	4	0
PLASTIC	36	29	14	0	0	0	3	18	7
THORACIC	19	18	6	0	0	0	3	0	0
VASCULAR	26	17	8	0	0	0	3	0	0

The 3- and 5-skill level personnel perform many tasks in common (time spent overlap is 86 percent). The tasks which show differences between the AFSCs 90232 and 90252 positions indicate more of the 5-skill level perform supply-related functions and are more involved with direct patient care, such as assisting anesthetists or catheterizing patients. Table 14 presents representative tasks performed by these airmen.

DAFSC 90272. The 158 7-skill level Surgical Services Technicians spend 32 percent of their time in managerial duties, such as organizing, planning, directing, inspecting, evaluating, and training. In line with these duties, they spend 12 percent of their time performing administrative or materials procedures. They still spend a large portion of their time (46 percent) performing sterile or nonsterile support and cleaning, disinfecting, sterilizing, and maintaining supplies and equipment. Tasks performed by 7-skill level personnel reflect a dual role of administrator and technician. Examples of their most time-consuming tasks are:

- supervise Surgical Service Specialists (AFSC 90252)
- participate in staff meetings
- establish work priorities
- type correspondence or reports
- maintain supplies, other than medications
- assign personnel to duty positions

Representative tasks are shown in Table 15. Examples of tasks which differentiate between the specialist and technician level are shown in Table 16.

AFSC 902X2B

DAFSC 90232B/90252B. Thirteen 3- and 5-skill level Urology shred personnel completed the inventory. The majority of their job time is divided between operating room support functions, sterilization of supplies and equipment; clinical diagnostic or screening functions; and administrative procedures. As Surgical Services Specialists with the Urology shred, they perform tasks directly related to their shred designation. Typical tasks performed include:

- assemble instruments for cystoscopies
- perform sterile set-ups for surgical procedures
- perform surgical skin cleansings
- catheterize patients
- position patients for diagnostic procedures
- schedule patient appointments
- set techniques for x-ray exposures
- establish sterile fields in OR

TABLE 14

REPRESENTATIVE TASKS PERFORMED BY COMBINED DAFSC 90232 AND 90252 AIRMEN

TASKS	PERCENT MEMBERS PERFORMING
G363 DON CAPS, MASKS, SCRUBSUITS, AND SHOE COVERS	93
G412 PREPARE AND PASS INSTRUMENTS TO OPERATING SURGEONS	92
G386 OPEN PEEL-PACKAGED STERILE SUPPLIES	92
G414 PREPARE AND PASS SUTURE MATERIALS TO OPERATING SURGEONS	92
G427 STOCK OR WITH STERILE AND NONSTERILE SUPPLIES	91
G395 PERFORM HAND AND ARM SCRUBS	91
G367 HAND INSTRUMENTS TO OPERATING SURGEONS	91
G426 SELECT SUPPLIES AND INSTRUMENTS FOR SURGERY	91
G430 TRANSFER STERILE ITEMS TO STERILE FIELDS	91
G364 DON OR DOFF STERILE GOWNS OR GLOVES	91
G413 PREPARE AND PASS STAPLING DEVICES TO OPERATING SURGEONS	91
G353 ASSIST SURGEONS WITH OPERATING ROOM (OR) SURGICAL PROCEDURES, SUCH AS BY HOLDING RETRACTORS	90
G351 ASSIST SURGEONS IN APPLYING STERILE DRAPES	90
G391 PASS SURGERY SPECIMENS TO CIRCULATORS	90
G420 REMOVE LINEN, SPONGES, OR INSTRUMENTS FROM OPERATING AREAS	90
H434 ASSEMBLE INSTRUMENT SETS	90
H480 REMOVE AND DISPOSE OF SHARPS	90
G350 ASSIST STERILE TEAM MEMBERS WITH DONNING OR REMOVING SURGICAL ATTIRE	89
G385 OPEN PAPER WRAPPED WRAPPERS OF STERILE SUPPLIES	89
G362 DISPOSE OF STERILE GOWNS OR GLOVES	89
G366 ESTABLISH STERILE FIELDS IN OR	89
G340 ADJUST MAYO STANDS	89
G348 ARRANGE INSTRUMENTS, SPONGES, AND LINEN ON BACK TABLES	88
G429 TRANSFER PATIENTS TO OR FROM OPERATING ROOM TABLES	88
G342 ADJUST OVERHEAD OPERATING LIGHTS	88
G393 PERFORM CONTINUOUS COUNTS OF SPONGES, NEEDLES, AND INSTRUMENTS USED DURING OPERATIONS	88
H451 DISPOSE OF BLOODY SOILED ITEMS	88
G352 ASSIST SURGEONS IN DRESSING INCISIONS	88

TABLE 15

REPRESENTATIVE TASKS PERFORMED BY DAFSC 90272 AIRMEN

TASKS	PERCENT MEMBERS PERFORMING
B21 COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED MATTERS	89
C67 WRITE APR	88
B32 ORIENT NEWLY ASSIGNED PERSONNEL	84
B40 SUPERVISE SURGICAL SERVICE SPECIALISTS (AFSC 90252)	82
G363 DON CAPS, MASKS, SCRUBSUITS, AND SHOE COVERS	79
B33 PARTICIPATE IN STAFF MEETINGS	79
G386 OPEN PEEL-PACKAGED STERILE SUPPLIES	76
G385 OPEN PAPER WRAPPED WRAPPERS OF STERILE SUPPLIES	75
B22 DIRECT EQUIPMENT MAINTENANCE OR UTILIZATION	75
G395 PERFORM HAND AND ARM SCRUBS	75
A9 ESTABLISH WORK PRIORITIES	75
G361 CORRECT BREAKS IN STERILE TECHNIQUE BY MEMBERS OF OPERATING TEAMS	75
G429 TRANSFER PATIENTS TO OR FROM OPERATING ROOM TABLES	74
G340 ADJUST MAYO STANDS	73
D101 PARTICIPATE IN EMERGENCY MEDICAL TRAINING, SUCH AS FIRST AID OR CARDIOPULMONARY RESUSCITATION	73
A3 DETERMINE REQUIREMENT FOR EQUIPMENT, SPACE, OR SUPPLIES	73
H481 REVIEW EXPIRATION DATES ON STERILE INSTRUMENTS, DISPOSABLE SUPPLIES, AND DRUGS	73
G364 DON OR DOFF STERILE GOWNS OR GLOVES	73
G430 TRANSFER STERILE ITEMS TO STERILE FIELDS	73
G350 ASSIST STERILE TEAM MEMBERS WITH DORNING OR REMOVING SURGICAL ATTIRE	73
G342 ADJUST OVERHEAD OPERATING LIGHTS	73
G371 INSPECT EQUIPMENT FOR CLEANLINESS AND OPERATION	72
G351 ASSIST SURGEONS IN APPLYING STERILE DRAPES	72
B17 ADVISE SUBORDINATES ON MEDICAL ETHICS	72
G353 ASSIST SURGEONS WITH OPERATING ROOM (OR) SURGICAL PROCEDURES, SUCH AS BY HOLDING RETRACTORS	72
G426 SELECT SUPPLIES AND INSTRUMENTS FOR SURGERY	72
A13 PREPARE DAILY WORK SCHEDULES	72
G360 CONSULT SCHEDULE OF OPERATIONS	71

TABLE 16

**TASKS WHICH DISTINGUISH BETWEEN DAFSC 90232/52 AND 90272 PERSONNEL
(PERCENT MEMBERS PERFORMING)**

TASKS	3/5	7	PERCENT DIFFERENCE
H475 PREPARE FORMULIN CONTAINERS FOR SURGICAL SPECIMENS	85	52	33
H451 DISPOSE OF BLOODY SOILED ITEMS	88	58	30
H474 PICK UP AND DELIVER SUPPLIES	72	44	28
G427 STOCK OR WITH STERILE AND NONSTERILE SUPPLIES	91	64	27
G358 CLEAN OR SUPPORT AREAS	74	47	27
G399 PERFORM STERILE DRAPING OF MICROSCOPES	55	28	27
H480 REMOVE AND DISPOSE OF SHARPS	90	63	27
H499 DISASSEMBLE OR EQUIPMENT AND INSTRUMENTS IN PREPARATION FOR CLEANING	88	61	27
H476 PREPARE INSTRUMENTS FOR CENTRAL SUPPLY	84	58	26
H455 MAKE SUPPLY DELIVERIES FROM CENTRAL SUPPLY TO USING UNITS	65	39	26
G422 REMOVE SOILED LINEN FROM PATIENTS	83	58	25
G391 PASS SURGERY SPECIMENS TO CIRCULATORS	90	65	25
G413 PREPARE AND PASS STAPLING DEVICES TO OPERATING SURGEONS	91	66	25

C67 WRITE APR	17	88	71
B21 COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED MATTERS	22	89	67
B40 SUPERVISE SURGICAL SERVICE SPECIALISTS (AFSC 90252)	21	82	61
A16 SCHEDULE TDY, LEAVES, OR PASSES	7	60	53
B17 ADVISE SUBORDINATES ON MEDICAL ETHICS	20	72	52
D98 MAKE ENTRIES ON AF FORMS 623 AND 623a (ON-THE-JOB TRAINING RECORD)	19	71	52
A9 ESTABLISH WORK PRIORITIES	24	75	52
E139 MAKE ENTRIES ON AF FORMS 601 (EQUIPMENT ACTION REQUEST)	15	66	51
A13 PREPARE DAILY WORK SCHEDULES	22	72	50

Their job is performed in the clinic setting and in the OR. Representative tasks are shown in Table 17.

DAFSC 90272B. The inventory was completed by 18 Urology Technicians. The specialists and technicians in the Urology shred perform many tasks in common (time spent overlap is 77 percent). As shown in Table 12, they also spend similar amounts of time across the duties. There were, however, some minor differences noted. The Urology Technician spends more time on administrative or materials procedures. The Urology Specialist is more likely than the technician to perform tasks such as: change or secure dressings; prepare, position, or disassemble equipment; and perform sterilization procedures. Examples of tasks AFSC 90272B personnel accomplish are shown in Table 18, while Table 19 lists examples of tasks which distinguish between these skill levels. Based on relative time ratings, they spend more time on such tasks as:

- maintain supplies, other than medication
- order supplies using shopping guides
- maintain property custodian log books
- determine requirement for equipment, space, or supplies
- schedule patient appointments

AFSC 902X2C

DAFSC 90232C/90252C. The 47 Surgical Services Specialists assigned to the Orthopedics shred spend 42 percent of their time performing clinical, diagnostic, or screening functions. They spend 19 percent of their time performing administrative or materials procedures and the same amount of time performing sterile or nonsterile support of OR procedures. Their most time-consuming tasks involve the application and removal of various types of casts or splints. They also spend time assisting the doctor in treatment of fractures, strains, and contusions, as well as assisting the surgeon with OR procedures. They spend most of their time in the clinic setting, where they schedule patient appointments, screen patient records, and explain clinical policies to patients. Representative tasks for the Orthopedic Surgical Services Specialist are shown in Table 20.

DAFSC 90272C. The 31 technicians with the C-shred spend similar amounts of time on the same duties as the specialists. They spend slightly less time on clinic and OR procedures, while spending additional time in administrative and supervisory duties. The time spent overlap between the specialists and the technicians in this shred is 82 percent. More of the 7-level perform a few technical tasks such as:

- apply balanced suspension with skin traction devices
- apply cervical halter traction devices
- assist doctor in treatment of congenital anomalies

TABLE 17

REPRESENTATIVE TASKS PERFORMED BY COMBINED AFSC 90232B AND 90252B AIRMEN

<u>TASKS</u>	<u>PERCENT MEMBERS PERFORMING</u>
F235 ASSEMBLE INSTRUMENTS FOR CYSTOSCOPIES	100
G385 OPEN PAPER WRAPPED WRAPPERS OF STERILE SUPPLIES	100
G411 POSITION STERILE TABLES	100
G386 OPEN PEEL-PACKAGED STERILE SUPPLIES	100
G363 DON CAPS, MASKS, SCRUBSUITS, AND SHOE COVERS	100
F337 SHOOT KIDNEY-URETER-BLADDER (KUB) X-RAYS	100
F308 PREPARE ACCESSORY EQUIPMENT, SUCH AS LAMPS, FOR DIAGNOSTIC PROCEDURES	100
G366 ESTABLISH STERILE FIELDS IN OR	100
I493 CATHETERIZE PATIENTS	100
F321 PREPARE STERILE SET-UPS FOR SURGICAL PROCEDURES	100
G402 PERFORM SURGICAL SKIN CLEANSINGS	100
G381 OBTAIN DRUGS FROM PHARMACIES	100
F307 POSITION PATIENTS FOR DIAGNOSTIC PROCEDURES	100
E187 SCHEDULE PATIENT APPOINTMENTS	100
F334 SET TECHNIQUES FOR X-RAY EXPOSURES	100
I511 TAKE SPECIMENS TO LABORATORIES	92
F306 PERFORM URODYNAMIC TESTING (CYSTOMETROGRAMS & URINE FLOW)	92
I502 OBTAIN PATIENTS RECORDS	92
F259 CHANGE SOLUTIONS DURING SURGICAL PROCEDURES	92
G353 ASSIST SURGEONS WITH OPERATING ROOM (OR) SURGICAL PROCEDURES, SUCH AS BY HOLDING RETRACTORS	92
G364 DON OR DOFF STERILE GOWNS OR GLOVES	92
G387 OPERATE ELECTROSURGICAL APPARATUSES	92
G368 HANDLE DRUGS AND SOLUTIONS	92
G426 SELECT SUPPLIES AND INSTRUMENTS FOR SURGERY	92
G340 ADJUST MAYO STANDS	92
G342 ADJUST OVERHEAD OPERATING LIGHTS	92
G343 ADJUST UROLOGY EXAM TABLE HEIGHT AND POSITION	92
G351 ASSIST SURGEONS IN APPLYING STERILE DRAPES	92
F309 PREPARE AND DRAPE PATIENTS FOR DIAGNOSTIC PROCEDURES	92
F262 CLEAN CLINIC EXAMINING AND TREATMENT ROOMS	92
F319 PREPARE PATIENTS FOR X-RAYS	92

TABLE 18
REPRESENTATIVE TASKS PERFORMED BY AFSC 90272B AIRMEN

TASKS	PERCENT MEMBERS PERFORMING
F275 INSTILL XYLOCAINE JELLIES INTRAURETHALLY	94
E175 PERFORM PERIODIC INVENTORIES OF EQUIPMENT AND SUPPLIES, OTHER THAN DATED MEDICATIONS	94
A3 DETERMINE REQUIREMENTS FOR EQUIPMENT, SPACE, OR SUPPLIES	94
G363 DON CAPS, MASKS, SCRUBSUITS, AND SHOE COVERS	94
F321 PREPARE STERILE SET-UPS FOR SURGICAL PROCEDURES	94
E122 MAINTAIN DAILY CLINIC PATIENT LOGS	89
E163 MAKE ENTRIES ON SF FORMS 548 (CHEMISTRY III (URINE))	89
E162 MAKE ENTRIES ON SF FORMS 547 (CHEMISTRY II)	89
G364 DON OR DOFF STERILE GOWNS OR GLOVES	89
F284 OBTAIN URINE SPECIMENS FROM MALE PATIENTS	89
E167 MAKE ENTRIES ON SF FORMS 553 (MICROBIOLOGY I)	89
F306 PERFORM URODYNAMIC TESTING (CYSTOMETROGRAMS & URINE FLOW)	89
E161 MAKE ENTRIES ON SF FORMS 546 (CHEMISTRY I)	89
H480 REMOVE AND DISPOSE OF SHARPS	89
E117 EXPLAIN CLINICAL POLICIES TO PATIENTS	89
E172 ORDER SUPPLIES USING SHOPPING GUIDES	89
E187 SCHEDULE PATIENT APPOINTMENTS	89
F235 ASSEMBLE INSTRUMENTS FOR CYSTOSCOPIES	89
F335 SET UP AND ASSIST PHYSICIAN IN DIAGNOSTIC PROCEDURES	89
I493 CATHETERIZE PATIENTS	89
E166 MAKE ENTRIES ON SF FORMS 551 (SEROLOGY)	89
D101 PARTICIPATE IN EMERGENCY MEDICAL TRAINING, SUCH AS FIRST AID OR CARDIOPULMONARY RESUSCITATION	89
E176 PICK UP DAILY CLINIC ADMINISTRATIVE DISTRIBUTION	89
E137 MAKE ENTRIES ON AF FORMS 560 (ADMISSION AUTHORIZATION AND TREATMENT STATEMENT)	83
E141 MAKE ENTRIES ON DD FORMS 1150 (REQUEST FOR ISSUE OR TURN-IN)	83
G351 ASSIST SURGEONS IN APPLYING STERILE DRAPES	83

TABLE 19

TASKS WHICH DISTINGUISH BETWEEN 90232B/90252B AND 90272B PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS	3/5	7	PERCENT DIFFERENCE
F258 CHANGE DRESSINGS	85	39	46
I503 PACK OR UNPACK OPERATING ROOM FIELD SUPPLIES	62	17	45
G411 POSITION STERILE TABLES	100	61	39
H472 PERFORM STERILIZATION OF ITEMS USED IN PATIENT CARE AREAS	54	17	37
G339 ADJUST MANUAL TABLE HEIGHT AND POSITION	62	28	34
G381 OBTAIN DRUGS FROM PHARMACIES	100	67	33
F276 LABEL PHOTOGRAPHS AND SLIDES, OTHER THAN X-RAYS	38	6	32
G406 POSITION AND TRANSPORT PATIENTS IN WHEELCHAIRS	92	61	31
H448 DAMP DUST HORIZONTAL SURFACES, STERILE AND NONSTERILE STORAGE AREAS WITH GERMICIDES	69	39	30
G416 PREPARE OR FOR SEPTIC PROCEDURES	46	17	29
G370 IDENTIFY DRUGS AND SOLUTIONS	85	56	29
H449 DISASSEMBLE OR EQUIPMENT AND INSTRUMENTS IN PREPARATION FOR CLEANING	62	33	29

E181 REVIEW AND SIGN CUSTODIAL ACTION LISTS (CAL)	0	67	67
A5 ESTABLISH INFECTION CONTROL PROCEDURES	8	72	64
C50 EVALUATE FINANCIAL REQUIREMENTS	0	61	61
C44 ANALYZE WORKLOAD REQUIREMENTS	15	72	57
B43 WRITE MILITARY JOB DESCRIPTIONS	0	56	56
E183 REVIEW AND SIGN USING ACTIVITY ISSUE/TURN IN LISTS	23	78	55
B21 COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED MATTERS	23	78	55
E140 MAKE ENTRIES ON AF FORMS 765 (HOSPITAL INCIDENT STATEMENT)	8	61	53
C47 EVALUATE CLINIC REQUIREMENTS FOR PERSONNEL AND EQUIPMENT	31	83	52

TABLE 20

REPRESENTATIVE TASKS PERFORMED BY DAFSC 90232/52C

TASKS	PERCENT MEMBERS PERFORMING
F329 REMOVE PLASTER AND FIBERGLASS SPLINTS	100
F328 REMOVE PLASTER AND FIBERGLASS CASTS	100
F224 APPLY SHORT LEG PLASTER AND FIBERGLASS CASTS	100
F221 PREPARE STERILE SET-UPS FOR SURGICAL PROCEDURES	100
F222 APPLY SHORT ARM PLASTER AND FIBERGLASS SPLINTS	100
F228 APPLY STANDARD SHORT ARM PLASTER AND FIBERGLASS CASTS	98
F225 APPLY SHORT LEG PLASTER AND FIBERGLASS SPLINTS	98
F227 APPLY STANDARD LONG ARM PLASTER AND FIBERGLASS CASTS	98
F205 APPLY LONG ARM PLASTER AND FIBERGLASS SPLINTS	98
F207 APPLY LONG LEG CYLINDER PLASTER AND FIBERGLASS CASTS	98
F255 BRIEF PATIENTS ON CAST CARE PROCEDURES	96
F242 ASSIST DOCTOR IN TREATMENT OF FRACTURES	96
F258 CHANGE DRESSINGS	96
E187 SCHEDULE PATIENT APPOINTMENTS	96
F248 ASSIST DOCTOR IN TREATMENT OF SPRAINS, STRAINS AND CONTUSIONS	94
F220 PREPARE SPECIMENS FOR LABORATORY AND PATHOLOGY	94
F243 ASSIST DOCTOR IN TREATMENT OF MUSCLE, TENDON, AND TENDON SHEATH INJURIES	100
F206 APPLY LONG ARM SUGAR TONG PLASTER AND FIBERGLASS SPLINTS	94
F310 PREPARE CASTING MATERIAL	91
F208 APPLY LONG LEG PLASTER AND FIBERGLASS CASTS	91
F330 REMOVE SKIN STAPLES	91
F240 ASSIST DOCTOR IN TREATMENT OF DISLOCATIONS AND SUBLUXATIONS	91
F209 APPLY LONG LEG PLASTER AND FIBERGLASS SPLINTS	91
F223 APPLY SHORT ARM SUGAR TONG PLASTER AND FIBERGLASS SPLINTS	89
F331 SCHEDULE PATIENTS FOR SURGERY	89
F204 APPLY LONG ARM NAVICULAR PLASTER AND FIBERGLASS CASTS	89
F202 APPLY LONG ARM CYLINDER PLASTER AND FIBERGLASS CASTS	89
F317 PREPARE PATIENTS FOR REMOVAL OF PLASTER OR FIBERGLASS CASTS	87
E170 MAKE ENTRIES ON SF FORMS 600 (HEALTH RECORD-CHRONOLOGICAL RECORD OF MEDICAL CARE)	87
E156 MAKE ENTRIES ON SF FORMS 519A (RADIOLOGIC CONSULTATION REQUEST/REPORT)	87
G353 ASSIST SURGEONS WITH OPERATING ROOM (OR) SURGICAL PROCEDURES, SUCH AS BY HOLDING RETRACTORS	87
E174 PERFORM PERIODIC INVENTORIES OF DATED MEDICATIONS TO DETERMINE CURRENCY	87
F314 PREPARE PATIENTS FOR APPLICATION OF PLASTER OR FIBERGLASS CASTS	85
G352 ASSIST SURGEONS IN DRESSING INCISIONS	85
F237 ASSIST DOCTOR IN TREATMENT OF ACUTE JOINT INFECTIONS	85
E165 MAKE ENTRIES ON SF FORMS 550 (URINALYSIS)	85
E117 EXPLAIN CLINICAL POLICIES TO PATIENTS	83
F249 ASSIST DOCTOR IN TREATMENT OF TRAUMATIC JOINT AFFECTIONS	83

Table 21 lists representative tasks, and Table 22 shows tasks which differentiate between the skill levels.

AFSC 902X2D

DAFSC 90232D/90252D. Twenty-seven D-shred personnel with a 3- or 5-skill level completed the Surgical Services Job Inventory. These personnel divide their job time primarily into three areas: performing administrative or materials procedures; performing clinical, diagnostic, or screening functions; or performing sterile or nonsterile support of OR procedures. They also spend a portion of their job cleaning, disinfecting, sterilizing, and maintaining supplies and equipment. Typical tasks performed by these specialists are shown in Table 23. Examples of their most time-consuming tasks include:

- schedule patient appointments
- schedule patients for surgery
- remove foreign bodies from ears using suction
- clean clinic examining and treatment rooms
- prepare sterile set-ups for surgical procedures
- make entries on SF Forms 600 (Health Record-Chronological Record of Medical Care)

DAFSC 90272D. The technicians who completed the inventory (15) spend their time in the same areas as the specialists. Their time spent overlap is 75 percent, which indicates they do many of the same tasks and spend similar amounts of time on those tasks. The technicians spend more time on administrative or material procedures and are more apt to perform custodian-type tasks and be involved in completion of log books and medical forms. Tasks frequently performed by these 7-skill level personnel are shown in Table 24, and tasks which distinguish between the specialists and technicians are shown in Table 25. Tasks frequently performed by 7-skill level personnel include:

- schedule patients for surgery
- explain clinical policies to patients
- schedule patient appointments
- answer patient medical inquiries
- make entries on AF Forms 555 (Patient Visit Register)
- make entries on AF Forms 600 (Health-Record Chronological Record of Medical Care)
- prepare and submit daily patient count statistics

TABLE 21

REPRESENTATIVE TASKS PERFORMED BY DAFSC 90272C

TASKS	PERCENT MEMBERS PERFORMING
F248 ASSIST DOCTOR IN TREATMENT OF SPRAINS, STRAINS, AND CONTUSIONS	100
F208 APPLY LONG LEG PLASTER AND FIBERGLASS CASTS	100
F220 APPLY SHORT ARM NAVICULAR PLASTER AND FIBERGLASS CASTS	100
F243 ASSIST DOCTOR IN TREATMENT OF MUSCLE, TENDON, AND TENDON SHEATH INJURIES	100
F207 APPLY LONG LEG CYLINDER PLASTER AND FIBERGLASS CASTS	100
F205 APPLY LONG ARM PLASTER AND FIBERGLASS SPLINTS	100
F223 APPLY SHORT ARM SUGAR TONG PLASTER AND FIBERGLASS SPLINTS	100
F251 ASSIST DOCTOR IN TREATMENT OF WOUNDS TO JOINTS	100
F209 APPLY LONG LEG PLASTER AND FIBERGLASS SPLINTS	100
F227 APPLY STANDARD LONG ARM PLASTER AND FIBERGLASS CASTS	100
F330 REMOVE SKIN STAPLES	100
F222 APPLY SHORT ARM PLASTER AND FIBERGLASS SPLINTS	100
F242 ASSIST DOCTOR IN TREATMENT OF FRACTURES	100
F221 APPLY SHORT ARM PLASTER AND FIBERGLASS CASTS	100
F328 REMOVE PLASTER AND FIBERGLASS CASTS	100
F329 REMOVE PLASTER AND FIBERGLASS SPLINTS	100
F224 APPLY SHORT LEG PLASTER AND FIBERGLASS CASTS	97
F206 APPLY LONG ARM SUGAR TONG PLASTER AND FIBERGLASS SPLINTS	97
F204 APPLY LONG ARM NAVICULAR PLASTER AND FIBERGLASS CASTS	97
F225 APPLY SHORT LEG PLASTER AND FIBERGLASS SPLINTS	97
F240 ASSIST DOCTOR IN TREATMENT OF DISLOCATIONS AND SUBLUXATIONS	97
F333 SCREEN RECORDS FOR PATIENT FOLLOW-UP	97
F203 APPLY LONG ARM HANGING PLASTER AND FIBERGLASS CASTS	97
F255 BRIEF PATENTS ON CAST CARE PROCEDURES	97
F228 APPLY STANDARD SHORT ARM PLASTER AND FIBERGLASS CASTS	97
F317 PREPARE PATIENTS FOR REMOVAL OF PLASTER OR FIBERGLASS CASTS	97

TABLE 22

**TASKS WHICH DISTINGUISH BETWEEN DAFSC 90232C/90252C AND 90272C PERSONNEL
(PERCENT MEMBERS PERFORMING)**

TASKS	3/5	7	PERCENT DIFFERENCE
G368 HANDLE DRUGS AND SOLUTIONS	68	42	26
G395 PERFORM HAND AND ARM SCRUBS	81	52	26
G382 OBTAIN EQUIPMENT AND SUPPLIES FOR SURGERY	43	19	24
H480 REMOVE AND DISPOSE OF SHARPS	81	58	23
G405 POSITION AND OPERATE AUDIO VISUAL EQUIPMENT	26	3	22
G422 REMOVE SOILED LINEN FROM PATIENTS	38	16	22
H479 PREPARE SOLUTIONS FOR DISINFECTING SKIN AND INANIMATE MATERIALS	38	16	22
G424 RETURN UNUSED SUPPLIES TO STORAGE AREAS	34	13	21
E173 PERFORM MAINTENANCE ON INSTRUMENTS USED	60	39	21
E163 MAKE ENTRIES ON SF FORMS 548 (CHEMISTRY III (URINE))	66	45	21
E168 MAKE ENTRIES ON SF FORMS 554 (MICROBIOLOGY II)	66	45	21
G425 SECURE DRESSINGS	79	58	21
G381 OBTAIN DRUGS FROM PHARMACIES	72	52	20
F262 CLEAN CLINIC EXAMINING AND TREATMENT ROOMS	81	61	20
G413 PREPARE AND PASS STAPLING DEVICES TO OPERATING SURGEONS	64	45	19
G390 OPERATE SKIN STAPLING DEVICES	70	52	19
G406 POSITION AND TRANSPORT PATIENTS IN WHEELCHAIRS	77	58	19

C67 WRITE APR	23	94	70
B17 ADVISE SUBORDINATES ON MEDICAL ETHICS	90	26	65
A2 ASSIGN SPONSORS FOR NEW PERSONNEL	6	68	61
B21 COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED MATTERS	32	87	55
C62 INDORSE AIRMAN PERFORMANCE REPORTS (APR)	13	68	55
C47 EVALUATE CLINIC REQUIREMENTS FOR PERSONNEL AND EQUIPMENT	21	74	53
D98 MAKE ENTRIES ON AF FORMS 623 AND 623a (ON-THE-JOB TRAINING RECORD)	19	71	52
A1 ASSIGN PERSONNEL TO DUTY POSITIONS	26	77	51

TABLE 23

REPRESENTATIVE TASKS PERFORMED BY COMBINED AFSC 90232D AND 90252D

TASKS	PERCENT MEMBERS PERFORMING
E187 SCHEDULE PATIENT APPOINTMENTS	96
G363 DON CAPS, MASKS, SCRUBSUITS, AND SHOE COVERS	93
E117 EXPLAIN CLINICAL POLICIES TO PATIENTS	93
F331 SCHEDULE PATIENTS FOR SURGERY	89
F326 REMOVE FOREIGN BODIES FROM EARS USING SUCTION	89
F262 CLEAN CLINIC EXAMINING AND TREATMENT ROOMS	89
F325 REMOVE FOREIGN BODIES FROM EARS USING ALLIGATOR FORCEPS	89
G362 DISPOSE OF STERILE GOWNS OR GLOVES	89
G348 ARRANGE INSTRUMENTS, SPONGES, AND LINEN ON BACK TABLES	89
G367 HAND INSTRUMENTS TO OPERATING SURGEONS	89
G412 PREPARE AND PASS INSTRUMENTS TO OPERATING SURGEONS	89
G364 DON OR DOFF STERILE GOWNS OR GLOVES	89
G391 PASS SURGERY SPECIMENS TO CIRCULATORS	89
F305 PERFORM TYMPANOMETRY	89
F321 PREPARE STERILE SET-UPS FOR SURGICAL PROCEDURES	85
G414 PREPARE AND PASS SUTURE MATERIALS TO OPERATING SURGEONS	85
G366 ESTABLISH STERILE FIELDS IN OR	85
G340 ADJUST MAYO STANDS	85
F327 REMOVE FOREIGN BODIES FROM EARS USING WIRE LOOPS	85
G353 ASSIST SURGEONS WITH OPERATING ROOM (OR) SURGICAL PROCEDURES, SUCH AS BY HOLDING RETRACTORS	85
G351 ASSIST SURGEONS IN APPLYING STERILE DRAPES	85
F258 CHANGE DRESSINGS	85
G395 PERFORM HAND AND ARM SCRUBS	85
G430 TRANSFER STERILE ITEMS TO STERILE FIELDS	85
F287 PERFORM AIR CONDUCTION HEARING TESTS	85
F288 PERFORM BONE CONDUCTION TESTS	85
E164 MAKE ENTRIES ON SF FORMS 549 (HEMATOLOGY)	81
E186 REVIEW SF FORMS 513 (MEDICAL RECORD-CONSULTATION SHEET)	81
H480 REMOVE AND DISPOSE OF SHARPS	81
G350 ASSIST STERILE TEAM MEMBERS WITH DORNING OR REMOVING SURGICAL ATTIRE	81
E166 MAKE ENTRIES ON SF FORMS 551 (SEROLOGY)	81
G352 ASSIST SURGEONS IN DRESSING INCISIONS	81
E165 MAKE ENTRIES ON SF FORMS 550 (URINALYSIS)	78
F320 PREPARE SPECIMENS FOR LABORATORY AND PATHOLOGY	78
G386 OPEN PEEL-PACKAGED STERILE SUPPLIES	78
H481 REVIEW EXPIRATION DATES ON STERILE INSTRUMENTS, DISPOSABLE SUPPLIES, AND DRUGS	78
F190 ANSWER PATIENT MEDICAL INQUIRIES	78
H464 ORDER PHARMACY SUPPLIES	78
G368 HANDLE DRUGS AND SOLUTIONS	78
E121 MAINTAIN CLINIC FORMS LEVELS	78

TABLE 24

REPRESENTATIVE TASKS PERFORMED BY DAFSC 90272D

TASKS	PERCENT MEMBERS PERFORMING
E117 EXPLAIN CLINICAL POLICIES TO PATIENTS	100
E187 SCHEDULE PATIENT APPOINTMENTS	100
F287 PERFORM AIR CONDUCTION HEARING TESTS	100
F288 PERFORM BONE CONDUCTION TESTS	100
F331 SCHEDULE PATIENTS FOR SURGERY	93
F190 ANSWER PATIENT MEDICAL INQUIRIES	93
E170 MAKE ENTRIES ON SF FORMS 600 (HEALTH RECORD-CHRONOLOGICAL RECORD OF MEDICAL CARE)	93
E177 PREPARE AND SUBMIT DAILY PATIENT COUNT STATISTICS	93
F289 PERFORM DAILY PATIENT COUNTS	93
F305 PERFORM TYMPANOMETRY	93
F326 REMOVE FOREIGN BODIES FROM EARS USING SUCTION	93
F325 REMOVE FOREIGN BODIES FROM EARS USING ALLIGATOR FORCEPS	93
E186 REVIEW SF FORMS 513 (MEDICAL RECORD-CONSULTATION SHEET)	93
E122 MAINTAIN DAILY CLINIC PATIENT LOGS	93
E125 MAINTAIN SUPPLIES, OTHER THAN MEDICATIONS	93
F327 REMOVE FOREIGN BODIES FROM EARS USING WIRE LOOPS	93
E174 PERFORM PERIODIC INVENTORIES OF DATED MEDICATIONS TO DETERMINE CURRENCY	93
F335 SET UP AND ASSIST PHYSICIAN IN DIAGNOSTIC PROCEDURES	93
F301 PERFORM SPEECH RECEPTION THRESHOLD (SRT) TESTS	93
F300 PERFORM SPEECH DISCRIMINATION TESTS	93
E136 MAKE ENTRIES ON AF FORMS 555 (PATIENT VISIT REGISTER)	87
F332 SCREEN PATIENTS	87
E172 ORDER SUPPLIES USING SHOPPING GUIDES	87
E175 PERFORM PERIODIC INVENTORIES OF EQUIPMENT AND SUPPLIES, OTHER THAN DATED MEDICATIONS	76
E137 MAKE ENTRIES ON AF FORMS 560 (ADMISSION AUTHORIZATION AND TREATMENT STATEMENT)	87
E176 PICK UP DAILY CLINIC ADMINISTRATIVE DISTRIBUTION	87
E116 COORDINATE STANDARD MEDICAL SUPPLY PURCHASES WITH MEDICAL MATERIEL OR VENDORS	87
F296 PERFORM ROUTINE EAR EXAMINATIONS WITH OTOSCOPE	87
E165 MAKE ENTRIES ON SF FORMS 550 (URINALYSIS)	87
E164 MAKE ENTRIES ON SF FORMS 549 (HEMOLOGY)	87
G364 DON OR DOFF STERILE GOWNS OR GLOVES	87
F290 PERFORM DIAGNOSTIC TESTS	87
F293 PERFORM HILGER NERVE STIMULATIONS	87
F303 PERFORM THROAT CULTURES	87
A3 DETERMINE REQUIREMENT FOR EQUIPMENT, SPACE, OR SUPPLIES	87
G367 HAND INSTRUMENTS TO OPERATING SURGEONS	80
G412 PREPARE AND PASS INSTRUMENTS TO OPERATING SURGEONS	80
E139 MAKE ENTRIES ON AF FORMS 601 (EQUIPMENT ACTION REQUEST)	80
G363 ASSIST SURGEONS WITH OPERATING ROOM (OR) SURGICAL PROCEDURES, SUCH AS BY HOLDING RETRACTORS	80
G381 OBTAIN DRUGS FROM PHARMACIES	80

TABLE 25

TASKS WHICH DISTINGUISH BETWEEN 90232D/90252D AND 90272D PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS	3/5	7	PERCENT DIFFERENCE
G430 TRANSFER STERILE ITEMS TO STERILE FIELDS	85	27	58
H448 DAMP DUST HORIZONTAL SURFACES, STERILE AND NONSTERILE STORAGE AREAS WITH GERMICIDES	52	7	45
H451 DISPOSE OF BLOODY SOILED ITEMS	63	27	36
G382 OBTAIN EQUIPMENT AND SUPPLIES FOR SURGERY	56	20	36
H449 DISASSEMBLE OR EQUIPMENT AND INSTRUMENTS IN PREPARATION FOR CLEANING	56	20	36
G392 PERFORM AS CIRCULATING TECHNICIAN IN SURGICAL SUITES	67	33	34
G429 TRANSFER PATIENTS TO OR FROM OPERATING ROOM TABLES	59	27	32
G396 PERFORM INITIAL AND BETWEEN CASE GERMICIDAL DAMP WIPING OF FURNITURE, FLOORS, OR FIXTURES OF OR	44	13	31
G427 STOCK OR WITH STERILE AND NONSTERILE SUPPLIES	30	0	30
H450 DISPOSE OF BLOOD AND BLOOD BY-PRODUCTS	48	20	28
G399 PERFORM STERILE DRAPING OF MICROSCOPES	74	47	27
G420 REMOVE LINEN, SPONGES, OR INSTRUMENTS FROM OPERATING AREAS	74	47	27

C67 WRITE APR	7	67	59
C47 EVALUATE CLINIC REQUIREMENTS FOR PERSONNEL AND EQUIPMENT	22	80	58
B21 COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED MATTERS	22	80	58
C50 EVALUATE FINANCIAL REQUIREMENTS	19	73	54
D98 MAKE ENTRIES ON AF FORMS 623 AND 623a (ON-THE-JOB TRAINING RECORD)	7	60	53
B26 IMPLEMENT SAFETY PROGRAMS	7	60	53
A10 PLAN SAFETY PROGRAMS	7	60	53
B17 ADVISE SUBORDINATES ON MEDICAL ETHICS	15	67	52
A16 SCHEDULE TDY, LEAVES, OR PASSES	15	67	52
C63 INITIATE REPORTS ON UNSATISFACTORY EQUIPMENT	22	73	51
E183 REVIEW AND SIGN USING ACTIVITY ISSUE/TURN IN LISTS	26	73	47
F290 PERFORM DIAGNOSTIC TESTS	41	87	46

ANALYSIS OF AFSC 902X2 AFR 39-1 SPECIALTY DESCRIPTIONS

Survey data were compared to the AFR 39-1 Specialty Descriptions for the Surgical Services career ladder, AFSC 902X2. These descriptions are intended to give a broad overview of the duties and tasks performed in each skill level of a specialty. The specialty description appears to generally reflect the responsibilities of the Surgical Service positions. Three- and 5-skill level personnel are accomplishing the basic technical skills, while the 7-skill level personnel assume a more advisory role in the performance of technical tasks. While the descriptions are generally indicative of the jobs performed, they do not reflect the amount of time which 7-skill level members spend on administrative tasks, particularly related to supply functions. For example, at least 50 percent of the 7-skill level personnel perform the following tasks:

- maintain supplies, other than medications
- perform periodic inventories of equipment and supplies,
other than medications
- order medical supplies using local purchase procedures
- direct equipment maintenance or utilization
- order supplies using shopping guides
- order medical supplies from USAF supply agencies
- research supply catalogues
- coordinate standard medical supply purchases with medical
materiel or vendors
- store commercial nonsterilized or presterilized items
- make entries on SF Forms 601 (Equipment Action Request)
- make entries on DD Forms 1348-6 (DOD Single Line Item
Requisition System Document - Manual)
- coordinate special equipment purchases with medical
materiel or vendors
- order nonmedical supplies from USAF supply catalogues
- store locally cleaned, disinfected, or sterilized items

In addition, career ladder jobs focusing on supply duties were also found within the career ladder structure analysis.

Previous discussions have shown that all shred personnel spend almost a third of their job time performing administrative type duties, such as scheduling patient appointments, completing forms, maintaining patient logs (see Table 12). The Urology function description mentions scheduling patients, and the Otorhinolaryngology description indicates they screen patient records and take histories. No mention of administrative tasks is made in the Orthopedic description. These brief statements do not reflect the amount of time spent performing tasks in this area. Consideration should be given to including statements which would reflect this responsibility for the shred personnel.

The paragraph detailing Urology functions is generally accurate, with task data supporting the responsibilities described. One area which may be considered for inclusion is injections. Urology personnel inject contrast media, such as dyes or fluorescein, under physicians direction; instill xylocaine jellies intraurethally; and administer injectable medications and immunizations to patients.

While the paragraph describing Orthopedic functions is generally accurate, a statement indicating Orthopedic personnel assist the physician might be appropriate for this paragraph. Survey data indicate Orthopedic personnel actually set up and assist the physician in diagnostic procedures. They assist the doctor in treatment of acute joint infections, congenital anomalies, dislocations and subluxations, fascia and bursae injuries, nervous system injuries, sprains, strains, contusions, traumatic joint affections, and wounds to joints. In addition, they assist doctors with treatments requiring arthrodesis and arthroplasty. In addition to applying and removing casts, orthopedic personnel also prepare the casting material. This is not mentioned in the description.

The description for otorhinolaryngology (ENT) personnel appears complete.

SPECIALTY TRAINING

Occupational survey data are a source of information which may be used to determine requirements for training and relevancy of training documents. OSR factors which may be used to review training are primarily percent members performing tasks and, secondarily, TE and TD ratings. TE ratings indicate which tasks experienced personnel in the career ladder feel are important for newly enlisted members to know to be able to do their job. These ratings do not necessarily imply that training must be in a resident training course; training may be provided through such means as OJT, FTD, and Career Development Courses (CDC). Senior personnel rate each task on a scale of 0 through 9; 0 indicating no training is required and 9 indicating that a very high emphasis should be placed on training that task. These ratings are processed to produce a rank-order listing of tasks from high degree of emphasis to no training required. The TD ratings provide a guide as to how difficult the tasks are to learn. The average TD rating is set to 5, so this value can be used as a reference to determine how much time will be needed to teach task knowledge or performance. These factors may assist managers in determining the most appropriate tasks to train and the most appropriate type of training: formal training (structure), CDC, or OJT (supplementary or advanced). The TE and TD ratings presented in this report were obtained from Surgical Service personnel without shreds, since the primary focus for training is the basic Surgical Service course, which all AFSC 902X2 personnel attend.

First-Enlistment Personnel

First-enlistment personnel are the target group for the initial resident training course. OSR data provide information which can be used by training personnel to develop or review training programs. For example, percent members performing task data are available for first job (1-24 months TAFMS) and first-enlistment (1-48 months TAFMS) groups. Background data provide such information as areas where they work and equipment used. Data from the career ladder structure analysis show the type of jobs being performed by newly assigned airmen. TE and TD ratings provide a consensus of opinion from experienced raters in what they consider important for training and how difficult the tasks are to learn.

First-enlistment personnel comprise 57 percent of all AFSC 902X2 personnel (including shreds). Sixty-two percent of the basic Surgical Services personnel are in their first enlistment. About a fourth of the Urology and ENT shreds are in their first enlistment, and almost half of the Orthopedic shred personnel are in their first enlistment. Time spent in the various duties for the basic and shred personnel first-enlistment personnel are shown in Table 26.

Of the newly trained basic Surgical Service members, 48 percent are assigned to a USAF Hospital; 26 percent to a USAF Medical Center; and 25 percent to a USAF Regional Hospital. They most frequently assist in General Surgery, Gynecology, Orthopedics, ENT, Pediatric, and Genitourinary Surgery.

Basic first-enlistment personnel spend the vast majority of their time performing support of operating room procedures (52 percent) and cleaning, disinfecting, and maintaining supplies and equipment. They perform an average of 137 tasks. Examples of tasks performed by basic Surgical Service first-term personnel are shown in Table 27. Table 28 shows the most frequently used equipment operated or maintained by personnel in initial job positions.

Table 29 lists the 25 tasks with highest TE ratings. These tasks illustrate the type of performance or knowledge considered important for training by senior technicians. These examples also illustrate the various type of data (percent members performing, TE, and TD) which can be used to review training documents. In Table 29, all of the tasks have TE ratings at least one standard deviation above the mean, which indicates these tasks should be considered for training. All of these tasks are also performed by high percentages of first-enlistment personnel. Several of the tasks also have above-average TD ratings, which indicates these are also difficult tasks to learn. These factors, together with percent members performing data, suggest these tasks are appropriate for some form of basic resident technical training. In all, slightly over a 100 tasks were rated high in TE (4.98 or above). A few of the tasks rated high in TE have less than 30 percent of the first-term members performing. For example, the task "Administer mouth-to-mouth resuscitation" is performed by only 14 percent of the first-termers; however, the TE rating is 6.07 and the TD rating is 5.21, both of which are above average. Criticality is usually a consideration when assigning a TE value, and this is

TABLE 26

AVERAGE PERCENT TIME SPENT IN DUTIES BY
FIRST-ENLISTMENT PERSONNEL

	<u>BASIC 902X2 (N=475)</u>	<u>902X2 B (N=8)</u>	<u>902X2 C (N=22)</u>	<u>902X2 D (N=20)</u>
A. ORGANIZING AND PLANNING	-	1	1	1
B. DIRECTING AND IMPLEMENTING	1	2	1	2
C. INSPECTING AND EVALUATING	-	1	-	1
D. TRAINING	1	1	1	-
E. PERFORMING ADMINISTRATIVE OR MATERIEL PROCEDURES	5	22	19	25
F. PERFORMING CLINICAL, DIAGNOSTIC, OR SCREENING FUNCTIONS	7	23	42	23
G. PERFORMING STERILE OR NONSTERILE SUPPORT OF OPERATING ROOM PROCEDURES	52	30	22	29
H. CLEANING, DISINFECTING, STERILIZING, AND MAINTAINING SUPPLIES AND EQUIPMENT	26	11	9	12
I. PERFORMING MISCELLANEOUS NURSING FUNCTIONS	5	6	3	4
J. PERFORMING CONTINGENCY TASKS	2	3	2	1

- Indicates less than 1 percent

TABLE 27

REPRESENTATIVE TASKS PERFORMED BY DAFSC 902X2 AIRMEN
WITH 1-48 MONTHS TAFMS

TASKS	PERCENT MEMBERS PERFORMING
G363 DON CAPS, MASKS, SCRUBSUITS, AND SHOE COVERS	95
G414 PREPARE AND PASS SUTURE MATERIALS TO OPERATING SURGEONS	93
G430 TRANSFER STERILE ITEMS TO STERILE FIELDS	93
G386 OPEN PEEL-PACKAGED STERILE SUPPLIES	93
G395 PERFORM HAND AND ARM SCRUBS	93
G412 PREPARE AND PASS INSTRUMENTS TO OPERATING SURGEONS	93
G413 PREPARE AND PASS STAPLING DEVICES TO OPERATING SURGEONS	93
G427 STOCK OR WITH STERILE AND NONSTERILE SUPPLIES	93
G367 HAND INSTRUMENTS TO OPERATING SURGEONS	93
G364 DON OR DOFF STERILE GOWNS OR GLOVES	93
G426 SELECT SUPPLIES AND INSTRUMENTS FOR SURGERY	93
G391 PASS SURGERY SPECIMENS TO CIRCULATORS	92
G351 ASSIST SURGEONS IN APPLYING STERILE DRAPES	92
G353 ASSIST SURGEONS WITH OPERATING ROOM (OR) SURGICAL PROCEDURES, SUCH AS BY HOLDING RETRACTORS	92
G420 REMOVE LINEN, SPONGES, OR INSTRUMENTS FROM OPERATING AREAS	92
H480 REMOVE AND DISPOSE OF SHARPS	92
G350 ASSIST STERILE TEAM MEMBERS WITH DONNING OR REMOVING SURGICAL ATTIRE	91
H434 ASSEMBLE INSTRUMENT SETS	91
G366 ESTABLISH STERILE FIELDS IN OR	91
G385 OPEN PAPER WRAPPED WRAPPERS OF STERILE SUPPLIES	91
G393 PERFORM CONTINUOUS COUNTS OF SPONGES, NEEDLES, AND INSTRUMENTS USED DURING OPERATIONS	90
G340 ADJUST MAYO STANDS	90
G429 TRANSFER PATIENTS TO OR FROM OPERATING ROOM TABLES	90
H451 DISPOSE OF BLOODY SOILED ITEMS	90
G362 DISPOSE OF STERILE GOWNS OR GLOVES	90
G348 ARRANGE INSTRUMENTS, SPONGES, AND LINEN ON BACK TABLES	90
G342 ADJUST OVERHEAD OPERATING LIGHTS	90
H449 DISASSEMBLE OR EQUIPMENT AND INSTRUMENTS IN PREPARATION FOR CLEANING	89

TABLE 28

EQUIPMENT USED BY FIRST-ENLISTMENT PERSONNEL

<u>EQUIPMENT</u>	<u>PERCENT MEMBERS USING (N=475)</u>
OPERATING ROOM TABLES AND ATTACHMENTS	97
KICK BUCKETS	97
MAYO TRAY STANDS	97
PREP STANDS	96
SOLUTION WARMING CABINETS	92
FIBER OPTIC LIGHT SOURCES	91
PATIENT BEDS	90
DOUBLE/SINGLE RING STANDS	89
LAPROSCOPES AND ACCESSORIES	88
HIGH SPEED PRESS INSTRUMENT STERILIZERS (FLASH)	86
WHEELED TRANSPORT LITTERS	86
SPECIALIZED RETRACTORS	85
SUCTION UNITS, STATIONARY	85
ULTRASONIC CLEANERS	85
INTRAVENOUS (IV) STANDS	84
SUCTION UNITS, PORTABLE	84
ELECTROSURGICAL UNITS	83
LEAD VESTS	83
RECOVERY ROOM BEDS	81
PATIENT ROLLERS	79
WASHER STERILIZERS	76
COMPRESSED GAS TANKS (ALL SIZES)	76
GRAVITY DISPLACEMENT STERILIZERS	72
SURGICAL DRILLS, GAS POWERED	70
PREVACUUM HIGH TEMPERATURE STERILIZERS	69
HAND TABLES	69
WHEELED CRIBS	68
CAST CARTS	67
HEAT SEALERS	66
PNEUMATIC TOURNIQUET DEVICES	65
HYPER/HYPOTHERMIA UNITS	64
SURGICAL TABLES, STATIONARY	64
SIGMOIDOSCOPES AND ACCESSORIES	64
ARTHROSCOPES AND ACCESSORIES	64
SURGICAL SAWS, GAS POWERED	63
SURGICAL MICROSCOPES, PORTABLE	61
ETHYLENE OXIDE AERATION STERILIZERS	61
SURGICAL LIGHTS, PORTABLE	60
VIDEO ARTHROSCOPY UNITS	60
DERMATOMES, POWERED	58
SURGICAL DRILLS, PORTABLE	56
ETHYLENE OXIDE AERATION CABINETS	56
GOMCO SUCTION UNITS	51
ORTHOPEDIC FRACTURE TABLES AND ACCESSORIES	51
ORTHOPEDIC FRACTURE COMPRESSION INSTRUMENTS AND ACCESSORIES	51

TABLE 29

EXAMPLES OF TASKS RATED HIGH IN TRAINING EMPHASIS
(PERCENT FIRST-ENLISTMENT PERSONNEL PERFORMING)

TASKS	PERCENT PERFORMING			
	TNG EMPH	1ST JOB	1ST ENL	TASK DIFF
G367 HAND INSTRUMENTS TO OPERATING SURGEONS	7.89	94	93	4.81
G393 PERFORM CONTINUOUS COUNTS OF SPONGES, NEEDLES, AND INSTRUMENTS USED DURING OPERATIONS	7.64	91	90	5.04
G348 ARRANGE INSTRUMENTS, SPONGES, AND LINEN ON BACK TABLES	7.61	91	90	4.55
G412 PREPARE AND PASS INSTRUMENTS TO OPERATING SURGEONS	7.61	95	93	5.10
G395 PERFORM HAND AND ARM SCRUBS	7.54	95	93	3.78
G361 CORRECT BREAKS IN STERILE TECHNIQUE BY MEMBERS OF OPERATING TEAMS	7.54	87	88	5.07
G350 ASSIST STERILE TEAM MEMBERS WITH DONNING OR REMOVING SURGICAL ATTIRE	7.50	91	91	3.84
G366 ESTABLISH STERILE FIELDS IN OR	7.46	92	91	4.65
G386 OPEN PEEL-PACKAGED STERILE SUPPLIES	7.46	93	93	3.84
G414 PREPARE AND PASS SUTURE MATERIALS TO OPERATING SURGEONS	7.39	97	94	4.78
G385 OPEN PAPER WRAPPED WRAPPERS OF STERILE SUPPLIES	7.36	91	91	3.70
G351 ASSIST SURGEONS IN APPLYING STERILE DRAPES	7.25	94	92	3.92
G353 ASSIST SURGEONS WITH OPERATING ROOM (OR) SURGICAL PROCEDURES, SUCH AS BY HOLDING RETRACTORS	7.25	94	92	4.54
G430 TRANSFER STERILE ITEMS TO STERILE FIELDS	7.25	95	93	4.49
H434 ASSEMBLE INSTRUMENT SETS	7.14	91	91	4.81
G364 DON OR DOFF STERILE GOWNS OR GLOVES	7.14	93	93	3.69
G398 PERFORM SEPTIC CASE CLEANING PROCEDURES	7.04	75	78	4.46
G392 PERFORM AS CIRCULATING TECHNICIAN IN SURGICAL SUITES	7.00	86	88	5.43
F321 PREPARE STERILE SET-UPS FOR SURGICAL PROCEDURES	6.96	78	78	5.13
G363 DON CAPS, MASKS, SCRUBSUITS, AND SHOE COVERS	6.96	95	95	2.99
G387 OPERATE ELECTROSURGICAL APPARATUSES	6.93	75	80	4.38
G413 PREPARE AND PASS STAPLING DEVICES TO OPERATING SURGEONS	6.93	95	93	4.72
G426 SELECT SUPPLIES AND INSTRUMENTS FOR SURGERY	6.93	93	93	4.99
H435 ASSEMBLE OR EQUIPMENT AND INSTRUMENTS AFTER CLEANING	6.89	83	84	4.71
G394 PERFORM END-OF-DAY CLEANING OF OR FLOORS, WALLS, AND FIXTURES	6.86	58	60	4.14

reflected in the high ratings, although the percent members performing is very low. A complete listing of the tasks in TE order is provided to the technical training school as part of the Training Extract.

Tables 30 through 35 show examples of tasks performed by specific shred personnel in their initial job positions and the most frequently used equipment operated or maintained by these personnel. Although ENT shred personnel attend a follow-on course, Urology and Orthopedic shred personnel receive their training through OJT. The data in these tables should assist OJT managers for the shred personnel in determining the most important tasks for training.

Training Documents

Percent members performing tasks, along with TE and TD, were used to assess the AFSC 902X2 STS. Survey data were also used to review the basic course at Sheppard AFB. Personnel from the school matched inventory tasks to appropriate sections of the STS and the POI. Senior personnel from Urology, Orthopedics, and ENT shreds at Wilford Hall Medical Center reviewed the shred-specific portions of the STS. Based on these matchings, computer listings displaying percent members performing and TE and TD ratings were obtained. These computer products are contained in the Training Extract, which is provided for the training managers' review. A new product has been added to the Training Extract. Automated Training Indicators (ATI) give technical school personnel an objective, categorical training decision indicator based on Atch 1, ATCR 52-22.

AFSC 902X2 Specialty Training Standard (STS)

The STS 902X2 (March 1986 with change June 1986) covers AFSCs 90232/B/C/D, 90252/B/C/D, and 90272/B/C/D. STS paragraphs 1 through 15 and 19 apply to the entire 902X2 AFS. Paragraph 16 applies to AFSC 902X2B only, paragraph 17 applies to AFSC 902X2C only, and paragraph 18 applies to AFSC 902X2D only. Presently, CDC and SKT coverage is not required for personnel assigned to Urology, Orthopedics, or ENT.

To review the current STS, computer products were generated for the basic AFSC and for the shreds. A copy of the computer products is included in the Training Extract. Information in the printout for the basic AFSC includes ATI, TE, TD, and percent members performing for first-job, first-enlistment, and 5- and 7-skill level groups. Information in the printout for the shreds includes percent members performing for the total group, 3- and 5-skill level combined, and 7-skill level personnel. Task factor indicators (ATI, TE, and TD) were computed for the basic AFSC only.

The STS is well supported by survey data. For paragraphs involving the entire 902X2 AFSC (1-15, 19), all major technical paragraphs showed acceptable percentages of Surgical Services personnel performing the duties outlined.

TABLE 30
 REPRESENTATIVE TASKS PERFORMED BY DAFSC 902X2B AIRMEN
 WITH 1-48 MONTHS TAFMS

TASKS	PERCENT MEMBERS PERFORMING
F235 ASSEMBLE INSTRUMENTS FOR CYSTOSCOPIES	100
G363 DON CAPS, MASKS, SCRUBSUITS, AND SHOE COVERS	100
G411 POSITION STERILE TABLES	100
F334 SET TECHNIQUES FOR X-RAY EXPOSURES	100
I502 OBTAIN PATIENTS RECORDS	100
F337 SHOOT KIDNEY-URETER-BLADDER (KUB) X-RAYS	100
F277 LABEL X-RAY FILMS	100
F308 PREPARE ACCESSORY EQUIPMENT, SUCH AS LAMPS, FOR DIAGNOSTIC PROCEDURES	100
G381 OBTAIN DRUGS FROM PHARMACIES	100
F258 CHANGE DRESSINGS	100
H475 PREPARE FORMULIN CONTAINERS FOR SURGICAL SPECIMENS	100
G386 OPEN PEEL-PACKAGED STERILE SUPPLIES	100
F319 PREPARE PATIENTS FOR X-RAYS	100
F321 PREPARE STERILE SET-UPS FOR SURGICAL PROCEDURES	100
F262 CLEAN CLINIC EXAMINING AND TREATMENT ROOMS	100
G402 PERFORM SURGICAL SKIN CLEANSINGS	100
I493 CATHETERIZE PATIENTS	100
E187 SCHEDULE PATIENT APPOINTMENTS	100
F307 POSITION PATIENTS FOR DIAGNOSTIC PROCEDURES	100
F335 SET UP AND ASSIST PHYSICIAN IN DIAGNOSTIC PROCEDURES	100
G385 OPEN PAPER WRAPPED WRAPPERS OF STERILE SUPPLIES	100
G366 ESTABLISH STERILE FIELDS IN OR	100
G378 OBTAIN AND DISTRIBUTE X-RAYS FROM RADIOLOGY DEPARTMENTS	88
G340 ADJUST MAYO STANDS	88
E172 ORDER SUPPLIES USING SHOPPING GUIDES	88
G426 SELECT SUPPLIES AND INSTRUMENTS FOR SURGERY	88
E174 PERFORM PERIODIC INVENTORIES OF DATED MEDICATIONS TO DETERMINE CURRENCY	88
F306 PERFORM URODYNAMIC TESTING (CYSTOMETROGRAMS & URINE FLOW)	88
F259 CHANGE SOLUTIONS DURING SURGICAL PROCEDURES	88
I511 TAKE SPECIMENS TO LABORATORIES	88
G364 DON OR DOFF STERILE GOWNS OR GLOVES	88
G410 POSITION PATIENTS ON OPERATING TABLES	88

TABLE 31

EQUIPMENT USED BY FIRST-ENLISTMENT B-SHRED AIRMEN

<u>EQUIPMENT</u>	<u>PERCENT MEMBERS USING (N=8)</u>
X-RAY MACHINES, STATIONARY	100
PREP STANDS	100
CYSTOSCOPY TABLES, STATIONARY	100
CYSTOSCOPES AND ACCESSORIES	100
OPERATING ROOM TABLES AND ATTACHMENTS	100
MAYO TRAY STANDS	100
KICK BUCKETS	100
FIBER OPTIC LIGHT SOURCES	88
DOUBLE/SINGLE RING STANDS	75
LEAD VESTS	75
RESECTOSCOPES AND ACCESSORIES	75
INTRAVENOUS (IV) STANDS	75
PATIENT BEDS	75
URODYNAMICS LABORATORIES	75
CENTRIFUGES, URINE	75
SPECIALIZED RETRACTORS	63
X-RAY DEVELOPERS	63
LITHOTRIPTERS, ULTRASONIC	63
URETERO-RENSCOPES & ACCESSORIES	63
ULTRASONIC CLEANERS	63
ELECTROSURGICAL UNITS	63
SURGICAL MICROSCOPES, PORTABLE	63
CYSTOSCOPY TABLES, PORTABLE	63
SUCTION UNITS, STATIONARY	63
SURGICAL LIGHTS, PORTABLE	50
PERCUTANEOUS NEPHROSTOMY SETS	50
HIGH SPEED PRESSURE INSTRUMENT STERILIZERS (FLASH)	50
SUCTION UNITS, PORTABLE	50
WHEELED TRANSPORT LITTERS	50
NEPHROSCOPES AND ACCESSORIES	38
SURGICAL TABLES, STATIONARY	38
RECOVERY ROOM BEDS	38
TRACTION DEVICES	38
PATIENT ROLLERS	38
SOLUTION WARMING CABINETS	38

TABLE 32

REPRESENTATIVE TASKS PERFORMED BY DAFSC 902X2C AIRMEN
WITH 1-48 MONTHS TAFMS

TASKS	PERCENT MEMBERS PERFORMING
F329 REMOVE PLASTER AND FIBERGLASS SPLINTS	100
F328 REMOVE PLASTER AND FIBERGLASS CASTS	100
F224 APPLY SHORT LEG PLASTER AND FIBERGLASS CASTS	100
F221 PREPARE STERILE SET-UPS FOR SURGICAL PROCEDURES	100
F222 APPLY SHORT ARM PLASTER AND FIBERGLASS SPLINTS	100
F225 APPLY SHORT LEG PLASTER AND FIBERGLASS SPLINTS	100
F227 APPLY STANDARD LONG ARM PLASTER AND FIBERGLASS CASTS	100
F207 APPLY LONG LEG CYLINDER PLASTER AND FIBERGLASS CASTS	100
F205 APPLY LONG ARM PLASTER AND FIBERGLASS SPLINTS	100
E187 SCHEDULE PATIENT APPOINTMENTS	100
F228 APPLY STANDARD SHORT ARM PLASTER AND FIBERGLASS CASTS	95
F220 APPLY SHORT ARM NAVICULAR PLASTER AND FIBERGLASS CASTS	95
F258 CHANGE DRESSINGS	95
F330 REMOVE SKIN STAPLES	95
F208 APPLY LONG LEG PLASTER AND FIBERGLASS CASTS	95
F206 APPLY LONG ARM SUGAR TONG PLASTER AND FIBERGLASS SPLINTS	95
F243 ASSIST DOCTOR IN TREATMENT OF MUSCLE, TENDON, AND TENDON SHEATH INJURIES	95
F209 APPLY LONG LEG PLASTER AND FIBERGLASS SPLINTS	95
F204 APPLY LONG ARM NAVICULAR PLASTER AND FIBERGLASS CASTS	95
F202 APPLY LONG ARM CYLINDER PLASTER AND FIBERGLASS CASTS	95
F255 BRIEF PATIENTS ON CAST CARE PROCEDURES	91
F223 APPLY SHORT ARM SUGAR TONG PLASTER AND FIBERGLASS SPLINTS	91
F242 ASSIST DOCTOR IN TREATMENT OF FRACTURES	91
F248 ASSIST DOCTOR IN TREATMENT OF SPRAINS, STRAINS, AND CONTUSIONS	91
F240 ASSIST DOCTOR IN TREATMENT OF DISLOCATIONS AND SUBLUXATIONS	91
E167 MAKE ENTRIES ON SF FORMS 553 (MICROBIOLOGY I)	91
F310 PREPARE CASTING MATERIAL	86
E170 MAKE ENTRIES ON SF FORMS 600 (HEALTH RECORD-CHRONOLOGICAL RECORD OF MEDICAL CARE)	86
G353 ASSIST SURGEONS WITH OPERATING ROOM (OR) SURGICAL PROCEDURES, SUCH AS BY HOLDING RETRACTORS	86
G352 ASSIST SURGEONS IN DRESSING INCISIONS	86
F254 ASSIST WITH AND APPLY SUPPORTIVE CORRECTIVE DEVICES (BRACES)	86
G351 ASSIST SURGEONS IN APPLYING STERILE DRAPEs	86
H480 REMOVE AND DISPOSE OF SHARPS	86
E165 MAKE ENTRIES ON SF FORMS 550 (URINALYSIS)	86
E174 PERFORM PERIODIC INVENTORIES OF DATED MEDICATIONS TO DETERMINE CURRENCY	86
G406 POSITION AND TRANSPORT PATIENTS IN WHEELCHAIRS	86
G395 PERFORM HAND AND ARM SCRUBS	82

TABLE 33
EQUIPMENT USED BY FIRST-ENLISTMENT C-SHRED AIRMEN

<u>EQUIPMENT</u>	<u>PERCENT MEMBERS USING (N=22)</u>
CASE SAMS	96
CASE CARTS	96
ORTHOPEDIC FRACTURE TABLES AND ACCESSORIES	91
ORTHOPEDIC FRACTURE COMPRESSION INSTRUMENTS AND ACCESSORIES	86
ARTHROSCOPES AND ACCESSORIES	82
HAND TABLES	73
OPERATING ROOM TABLES AND ATTACHMENTS	73
KICK BUCKETS	68
SURGICAL DRILLS, GAS POWERED	68
VIDEO ARTHROSCOPY UNITS	68
MAYO TRAY STANDS	64
STRYKER FRAMES	64
SPECIALIZED RETRACTORS	64
LEAD VESTS	64
SURGICAL SAMS, GAS POWERED	59
INTRAVENOUS (IV) STANDS	59
TRACTION DEVICES	55
ELECTROSURGICAL UNITS	55
SURGICAL TABLES, STATIONARY	55
FIBER OPTIC LIGHT SOURCES	55
PREP STANDS	50
PNEUMATIC TOWNIQUET DEVICES	50
DOUBLE/SINGLE RING STANDS	50
SUCTION UNITS, STATIONARY	50
WHEELED TRANSPORT LITTERS	50
PATIENT ROLLERS	46
COMPRESSED GAS TANKS (ALL SIZES)	41
SURGICAL SAMS, ELECTRIC	41
SUCTION UNITS, PORTABLE	41
PATIENT BEDS	41
SURGICAL DRILLS, PORTABLE	36
ULTRASONIC CLEANERS	36
SOLUTION WARMING CABINETS	36
HIGH SPEED PRESSURE INSTRUMENT STERILIZERS (FLASH)	32
WAGNER STERILIZERS	32
SURGICAL LIGHTS, PORTABLE	32
X-RAY MACHINES, PORTABLE	32
DERMATOMES, POWERED	32

TABLE 34

REPRESENTATIVE TASKS PERFORMED BY DAFSC 902X2D AIRMEN WITH 1-48 MONTHS TAFMS

<u>TASKS</u>	<u>PERCENT MEMBERS PERFORMING</u>
E187 SCHEDULE PATIENT APPOINTMENTS	100
E117 EXPLAIN CLINICAL POLICIES TO PATIENTS	95
F326 REMOVE FOREIGN BODIES FROM EARS USING SUCTION	90
F321 PREPARE STERILE SET-UPS FOR SURGICAL PROCEDURES	90
G362 DISPOSE OF STERILE GOWNS OR GLOVES	90
G363 DON CAPS, MASKS, SCRUBSUITS, AND SHOE COVERS	90
F325 REMOVE FOREIGN BODIES FROM EARS USING ALLIGATOR FORCEPS	90
G412 PREPARE AND PASS INSTRUMENTS TO OPERATING SURGEONS	90
G364 DON OR DOFF STERILE GOWNS OR GLOVES	90
F288 PERFORM BONE CONDUCTION TESTS	90
F331 SCHEDULE PATIENTS FOR SURGERY	85
F262 CLEAN CLINIC EXAMINING AND TREATMENT ROOMS	85
G348 ARRANGE INSTRUMENTS, SPONGES, AND LINEN ON BACK TABLES	85
G414 PREPARE AND PASS SUTURE MATERIALS TO OPERATING SURGEONS	85
G367 HAND INSTRUMENTS TO OPERATING SURGEONS	85
F327 REMOVE FOREIGN BODIES FROM EARS USING WIRE LOOPS	85
H480 REMOVE AND DISPOSE OF SHARPS	85
G351 ASSIST SURGEONS IN APPLYING STERILE DRAPES	85
F320 PREPARE SPECIMENS FOR LABORATORY AND PATHOLOGY	85
G353 ASSIST SURGEONS WITH OPERATING ROOM (OR) SURGICAL PROCEDURES, SUCH AS BY HOLDING RETRACTORS	85
G391 PASS SURGERY SPECIMENS TO CIRCULATORS	85
E166 MAKE ENTRIES ON SF FORMS 551 (SEROLOGY)	85
G340 ADJUST MAYO STANDS	85
H481 REVIEW EXPIRATION DATES ON STERILE INSTRUMENTS, DISPOSABLE SUPPLIES, AND DRUGS	85
E180 RETURN PATIENT MEDICAL RECORDS	85
F287 PERFORM AIR CONDUCTION HEARING TESTS	85
F305 PERFORM TYMPANOMETRY	85
F296 PERFORM ROUTINE EAR EXAMINATIONS WITH OTOSCOPE	80
G350 ASSIST STERILE TEAM MEMBERS WITH DONNING OR REMOVING SURGICAL ATTIRE	80
E186 REVIEW SF FORMS 513 (MEDICAL RECORD-CONSULTATION SHEET)	80
E164 MAKE ENTRIES ON SF FORMS 549 (HEMATOLOGY)	80
G366 ESTABLISH STERILE FIELDS IN OR	80
G352 ASSIST SURGEONS IN DRESSING INCISIONS	80
E177 PREPARE AND SUBMIT DAILY PATIENT COUNT STATISTICS	80
F258 CHANGE DRESSINGS	80
G395 PERFORM HAND AND ARM SCRUBS	80
G420 REMOVE LINEN, SPONGES, OR INSTRUMENTS FROM OPERATING AREAS	80
E174 PERFORM PERIODIC INVENTORIES OF DATED MEDICATIONS TO DETERMINE CURRENCY	80
G430 TRANSFER STERILE ITEMS TO STERILE FIELDS	80

TABLE 35

EQUIPMENT USED BY FIRST ENLISTMENT D SHRED AIRMEN

<u>EQUIPMENT</u>	<u>PERCENT MEMBERS USING (N=20)</u>
MAYO TRAY STANDS	95
FIBER OPTIC LIGHT SOURCES	90
NERVE STIMULATORS (HILGER)	90
OPERATING ROOM TABLES AND ATTACHMENTS	80
TYMPANOMETERS	75
AUDIOMETERS	75
SUCTION UNITS, STATIONARY	70
LARYNGOSCOPES AND ACCESSORIES	70
SURGICAL MICROSCOPES, PORTABLE	70
PREP STANDS	65
DOUBLE/SINGLE RING STANDS	65
KICK BUCKETS	65
PATIENT BEDS	65
SPECIALIZED RETRACTORS	60
SUCTION UNITS, PORTABLE	60
SURGICAL DRILLS, GAS POWERED	60
SURGICAL DRILLS, PORTABLE	60
HIGH SPEED PRESS INSTN STERILIZERS (FLASH)	60
WASHER STERILIZERS	55
SURGICAL LIGHTS, PORTABLE	55
BRONCHOSCOPES AND ACCESSORIES	50
HAND TABLES	45
SURGICAL SAWS, GAS POWERED	45
ELECTROSURGICAL UNITS	45
SOLUTION WARMING CABINETS	40
SPHYGMOMANOMETERS	40
ULTRASONIC CLEANERS	35
SURGICAL MICROSCOPES, STATIONARY	35
COMPRESSED GAS TANKS (ALL SIZES)	35
SURGICAL TABLES, STATIONARY	35
GOMCO SUCTION UNITS	35
PATIENT ROLLERS	35
WHEELED CRIBS	35

Data for shred personnel also support the individual paragraphs describing their specialized functions. Paragraphs containing general information or subject-matter knowledge were not evaluated.

Plan of Instruction (POI) 3ABR902X0

The May 1986 POI for the Surgical Services basic course was matched with survey data to generate a computer printout which displays the tasks referenced to areas in the POI. Basically, the training document was supported by survey data. While the elements are supported, some of the tasks matched to the elements have less than 30 percent members performing and low TE ratings. A review of all of the tasks matched under each training element should help training personnel decide where to place emphasis for that particular element. For instance, under element II 3, Anesthesia, five tasks are matched. Four of the tasks meet the criteria for training; however, the fifth task - "Administer topical local anesthetics" is performed by only 16 percent of the first-enlistment personnel and has a TE rating of 2. Table 36 lists some of the tasks not referenced to the POI, which more than 30 percent of the first-termers are performing and have an average-to-high TE. Instructors should review these tasks to determine if they need to be included in the course instruction and the next revised POI.

JOB SATISFACTION

Table 37 presents data showing job interest, perceived utilization of talents and training, and reenlistment intention of TAFMS groups for the basic AFSC members (does not include shreds). Data showing a comparative sample of medical personnel surveyed in 1986 are also shown for comparison. Overall, the Surgical Services personnel express very positive job interest and utilization of talents and training. Indicators are close to or higher than the comparative sample.

Reenlistment intent is slightly lower for the first and second enlistment groups than for the comparative sample; however, Surgical Services personnel in career status indicate a higher percentage planning to reenlist.

Table 38 summarizes the job satisfaction indicators for the basic Surgical Services personnel, shreds, and the comparative sample. Satisfaction indicators are generally high across all groups. Although not much lower, D-shred personnel show somewhat lower job interest and talents utilized. Reenlistment potential (percent indicating they will most likely reenlist) for the B-shred personnel is slightly lower than the other groups.

Job satisfaction was also examined for jobs identified within the career ladder. Most personnel in jobs identified have positive attitudes (see Table 39). Two small jobs have lower job interest and utilization of training. Personnel included in the Sterile Support Group perform a very limited job and most are in their first enlistment. The second group indicating less positive

TABLE 36

EXAMPLES OF TASKS UNREFERENCED TO THE 902X2 PLAN OF INSTRUCTION

TASKS	PERCENT PERFORMING				
	TNG EMPH	ATI*	1ST JOB	1ST ENL	TASK DIFF
F259 CHANGE SOLUTIONS DURING SURGICAL PROCEDURES	4.89	18	52	57	3.63
F309 PREPARE AND DRAPE PATIENTS FOR DIAGNOSTIC PROCEDURES	4.89	18	53	56	4.16
G358 CLEAN OR SUPPORT AREAS	6.43	18	74	75	3.58
G372 INVENTORY GENERAL SURGICAL EQUIPMENT	5.32	18	45	50	4.30
G373 INVENTORY SPECIAL SURGICAL EQUIPMENT	5.29	18	43	50	4.42
G374 INVENTORY SURGICAL INSTRUMENTS	5.36	18	50	56	4.23
G387 OPERATE ELECTROSURGICAL APPARATUSES	6.93	18	75	80	4.38
G399 PERFORM STERILE DRAPING OF MICROSCOPES	5.14	18	50	57	4.97
G424 RETURN UNUSED SUPPLIES TO STORAGE AREAS	5.18	18	83	87	3.09
H433 ASSEMBLE IN-HOUSE SPECIALTY SETS	6.57	18	53	62	5.08
H437 CHANGE NITROGEN TANKS	4.89	18	51	58	4.31
H438 CHANGE NITROUS OXIDE (N2O) TANKS	5.11	18	48	54	4.28
H450 DISPOSE OF BLOOD AND BLOOD BY-PRODUCTS	5.64	18	65	68	3.94
H453 INSPECT MICROSCOPIC OR DELICATE SURGICAL INSTRUMENTS	5.25	18	50	58	5.12
H482 STORE COMMERCIAL NONSTERILIZED OR PRESTERILIZED ITEMS	5.82	18	71	73	3.76
D101 PARTICIPATE IN EMERGENCY MEDICAL TRAINING, SUCH AS FIRST AID OR CARDIOPULMONARY RESUSCITATION	4.57	17	42	52	4.46
F234 ASSEMBLE INSTRUMENTS FOR BIOPSIES	4.21	17	58	59	4.46
F307 POSITION PATIENTS FOR DIAGNOSTIC PROCEDURES	4.61	17	52	58	4.77
F308 PREPARE ACCESSORY EQUIPMENT, SUCH AS LAMPS, FOR DIAGNOSTIC PROCEDURES	4.43	17	46	53	4.06
F336 SET UP AND ASSIST PHYSICIAN IN DIAGNOSTIC PROCEDURES	2.79	17	44	50	5.78
H455 MAKE SUPPLY DELIVERIES FROM CENTRAL SUPPLY TO USING UNITS	4.79	17	65	68	4.31
H469 ORDER LINEN SUPPLIES	4.21	17	61	67	3.58
H474 PICK UP AND DELIVER SUPPLIES	4.71	17	72	75	3.80
I512 TAKE X-RAYS TO RADIOLOGY	3.18	17	44	50	3.19
J515 DON OR DOFF CHEMICAL WARFARE PERSONAL PROTECTIVE CLOTHING	4.21	17	45	54	5.34
J517 LOAD OR UNLOAD PATIENTS ON PATIENT TRANSPORTATION VEHICLES	4.32	17	48	53	5.10
J526 TRANSFER LITTER PATIENTS	4.04	17	51	57	4.29

* ATI is a categorical training decision indicator based on Atch 1, ATCR 52-22

TABLE 37

COMPARISON OF JOB SATISFACTION INDICATORS BY TAFMS GROUPS
(PERCENT MEMBERS RESPONDING)*

	1-48 MOS TAFMS		49-96 MOS TAFMS		97+ MOS TAFMS	
	902X2 (N=475)	COMP SAMPLE** (N=1,877)	902X2 (N=100)	COMP SAMPLE** (N=768)	902X2 (N=194)	COMP SAMPLE** (N=1,261)
<u>EXPRESSED JOB INTEREST:</u>						
INTERESTING	88	74	79	68	77	78
SO-SO	7	14	13	18	15	12
DULL	3	11	5	13	7	10
<u>PERCEIVED UTILIZATION OF TALENTS:</u>						
FAIRLY WELL TO PERFECTLY LITTLE OR NOT AT ALL	89 10	75 24	88 12	72 28	83 17	82 18
<u>PERCEIVED UTILIZATION OF TRAINING:</u>						
FAIRLY WELL TO PERFECTLY LITTLE OR NOT AT ALL	93 6	81 19	83 16	73 27	86 13	81 18
<u>REENLISTMENT INTENTIONS:</u>						
YES, OR PROBABLY YES	59	61	65	67	74	63
NO, OR PROBABLY NO	38	38	33	33	8	14
PLAN TO RETIRE	-	-	-	-	17	19

- indicates less than 1 percent

* Columns may not add up to 100 percent due to rounding

** Comparative Sample includes Medical personnel surveyed in 1986 (AFSCs 902X0, 905X0, and 913X0)

TABLE 38

**COMPARISON OF JOB SATISFACTION INDICATORS FOR
BASIC SURGICAL SERVICES, SHREDS, AND COMPARATIVE SAMPLE
(PERCENT MEMBERS RESPONDING)**

	<u>902X2 (N=769)</u>	<u>902X2B (N=31)</u>	<u>902X2C (N=78)</u>	<u>902X2D (N=42)</u>	<u>COMP SAMPLE (N=3,906)</u>
JOB INTERESTING	83	77	81	74	74
TALENTS UTILIZED	87	81	87	76	77
TRAINING UTILIZED	89	81	80	81	79
REENLISTMENT	63	58	69	62	63

**COMPARISON OF JOB SATISFACTION INDICATORS BY CAREER LADDER STRUCTURE GROUPS
(PERCENT MEMBERS RESPONDING)***

	GROUP NUMBER							
	OPERATING ROOM PERS (N=632)	ENT AND UROLOGY CLINIC PERS (N=63)	NCOIC SURG SVCS (N=56)	ORTHOPEDIC CLINIC PERSONNEL (N=82)	CLINIC NCOICS (N=5)	SURG ENT PERS (N=9)	STERILE SPT PERS (N=16)	NCOIC SUP (N=11)
<u>EXPRESSED JOB INTEREST:</u>								
INTERESTING	86	76	80	82	40	89	50	73
SO-SO	9	13	14	9	60	11	38	9
DULL	3	8	5	5	-	-	6	9
<u>PERCEIVED UTILIZATION</u>								
<u>OF TALENTS:</u>								
FAIRLY WELL TO PERFECTLY	89	82	88	89	60	78	69	91
LITTLE OR NOT AT ALL	11	18	12	11	40	22	31	9
<u>PERCEIVED UTILIZATION</u>								
<u>OF TRAINING:</u>								
FAIRLY WELL TO PERFECTLY	92	86	95	79	60	89	81	73
LITTLE OR NOT AT ALL	8	14	5	20	40	11	19	27
<u>REENLISTMENT INTENTIONS:</u>								
YES, OR PROBABLY YES	63	64	64	70	60	78	88	54
NO, OR PROBABLY NO	32	29	14	19	20	11	12	36
PLAN TO RETIRE	3	6	20	11	20	11	-	9

- Indicates less than 1 percent

* Columns may not add up to 100 percent due to rounding

job interest and utilization of talents was the Clinic NCOIC group. They are a very senior group of five NCOICs, who are spending their time on administrative duties. This group, perhaps because of their seniority, also shows a lower reenlistment potential. Reenlistment potential ranged from a low of 54 percent to a high of 88 percent. Personnel identified as NCOIC, Supply had the lowest reenlistment potential, along with the Clinic NCOICs. Despite their lower job interest and perceived use of talents, members of the Sterile Support group had the highest reenlistment potential.

Job satisfaction data were compared to the previous survey respondents and the current sample (see Table 40). This data is shown for the basic personnel. Job satisfaction indices remain high for the Surgical Services personnel. Perceived use of training has increased considerably for first-term members. Reenlistment potential has increased for both first- and second-term personnel since the previous survey.

WRITE-IN COMMENTS

Individuals were encouraged to add additional information about the career ladder and their jobs at the end of the survey booklet. This included equipment used on their job, duties performed that were not included in the inventory, and suggestions for training.

Several members had comments concerning utilization of Surgical Services personnel, particularly on their initial assignments. The comments below are representative of the opinions expressed.

A senior career ladder member wrote: "The current method of randomly selecting first-term airmen out of the Operating Room Specialist Course and shredding them out to the subspecialty should be either done away with or modified. The OR course teaches nothing of practical use to our specialty except the basic "surgical scrub" techniques. Our job deals a lot with clinical aspects of medicine, Uroradiology, and Uroendoscopy, which this course deals with not at all. Of course if the airmen is lucky enough to be sent to a facility where there is a fully trained GU technician the impact is not that bad, however, some of these airmen are sent to "one-man" clinics where the only GU training will be received from the Urologist. I know this in fact happens, because while stationed at Keesler we received two requests from one-man Urology Clinic facilities for their Urol tech to be sent TDY to us for training. If this is to be a continued policy, maybe it should be a training requirement to send the new airmen TDY enroute to a Medical facility such as Keesler as a type of Phase II formal training prior to PCS."

Another career ladder representative replied: "I feel that I would like my job a whole lot more if I did more of what I was trained to do. I plan to reenlist, but not in this career field unless I get PCS orders to another base. I like the military, but I'm not that satisfied on my job. It seems

TABLE 40

COMPARISON OF JOB SATISFACTION INDICATORS FOR CURRENT AND PREVIOUS SURVEYS
(902X2 UNSHREDDED PERCENT MEMBERS RESPONDING)*

	1-48 MOS TAFMS		49-96 MOS TAFMS		97+ MOS TAFMS	
	1979	1986	1979	1986	1979	1986
<u>EXPRESSED JOB INTEREST:</u>						
INTERESTING	83	88	72	79	73	77
SO-SO	6	7	19	13	14	15
DULL	8	3	9	5	12	7
<u>PERCEIVED UTILIZATION OF TALENTS:</u>						
FAIRLY WELL TO PERFECTLY LITTLE OR NOT AT ALL	85 15	89 10	79 21	88 12	72 27	83 17
<u>PERCEIVED UTILIZATION OF TRAINING:</u>						
FAIRLY WELL TO PERFECTLY LITTLE OR NOT AT ALL	78 22	93 6	81 19	83 16	77 21	86 13
<u>REENLISTMENT INTENTIONS:</u>						
YES, OR PROBABLY YES	42	59	57	65	72	74
NO, OR PROBABLY NO	58	38	42	33	27	8

* Columns may not add up to 100 percent due to rounding

like all I do is paperwork, which after a while gets boring. I think this career field has a lot to offer, but for some reason doesn't. Manning is the big problem, but I know this is Air Force-wide problem."

Another comment along the same line was: "I do not feel that the training I have received is being utilized properly. Due to manning shortages, I am doing work intended for administrative personnel, not for medical technicians. I am not doing a job very much related to the 19 weeks of specialized training I received after my initial technical training school because of these manning problems."

Additional training comments included: "At this facility, _____, airmen out of tech school can't receive the necessary training to make them fully qualified 5-levels. All types of surgical procedures are performed infrequently. Thereby, technicians received inadequate training. Technicians, regardless of skill level should be transferred to other (larger hospitals) more often. No technicians have received PCS orders since the reopening of this surgical suite....Of the four technicians here, three are attempting to crosstrain, or will crosstrain, and the fourth is trying to PCS. At this facility, "good cases" are rarely performed. General surgery and very limited GYN surgery are the only surgical services offered. There is very little challenge offered here. A 7-level school, similar to the AFSC 902X0 career field, would be good for this career field. Also, rotating tech school graduates through larger hospitals would be nice. Something similar to the Radiology or Lab programs."

Comments from a larger facility include: "At this hospital, we do not do enough surgery for the amount of technicians that we have, so many of us are sent to man other parts of the hospital. We man surgery clinic, pharmacy, and the lab. I feel that my career field is being abused. If this system keeps going as is, none of us will be the best technicians that we should be. At present, we do a small amount of hand surgery, OB/GYN and general surgery....I was hoping to have more training time at a Regional Center or a Medical Center so I could learn more about being a Surgical Service Specialist."

IMPLICATIONS

The basic Surgical Services AFSC (902X2) is a very homogeneous career ladder, with a large number of tasks performed by high percentages of personnel. Shred personnel share a common core of tasks with the basic AFSC; however, their time is focused on clinic administrative and shred-specific technical responsibilities. Orthopedic personnel spend more time on clinic responsibilities than other shred members.

AFR 39-1 is consistent with tasks performed by AFSC 902X2 personnel. The descriptions should be reviewed to determine if they sufficiently delineate the full responsibilities of the career ladder and for shred designations. The training documents (STS and POI) were well supported by survey data. The POI does have unreferenced tasks which should be reviewed.

Job satisfaction is consistently high for the career ladder. Write-in comments indicate concerns related to utilization of personnel, particularly in their initial assignment.

APPENDIX A

TABLE A1

GROUP ID NUMBER AND TITLE: GRP077, OPERATING ROOM PERSONNEL

GROUP SIZE: 632

PERCENT OF SAMPLE: 68%

AVERAGE GRADE: E-3, E-4

AVERAGE TICF: 45 MONTHS

AVERAGE TAFMS: 54 MONTHS

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
G412 PREPARE AND PASS INSTRUMENTS TO OPERATING SURGEONS	99
G363 DON CAPS, MASKS, SCRUBSUITS, AND SHOE COVERS	99
G414 PREPARE AND PASS SUTURE MATERIALS TO OPERATING SURGEONS	99
G413 PREPARE AND PASS STAPLING DEVICES TO OPERATING SURGEONS	99
G427 STOCK OR WITH STERILE AND NONSTERILE SUPPLIES	98
G367 HAND INSTRUMENTS TO OPERATING SURGEONS	98
G395 PERFORM HAND AND ARM SCRUBS	98
G386 OPEN PEEL-PACKAGED STERILE SUPPLIES	98
G426 SELECT SUPPLIES AND INSTRUMENTS FOR SURGERY	98
G430 TRANSFER STERILE ITEMS TO STERILE FIELDS	98
G364 DON OR DOFF STERILE GOWNS OR GLOVES	98
G391 PASS SURGERY SPECIMENS TO CIRCULATORS	97
G353 ASSIST SURGEONS WITH OPERATING ROOM (OR) SURGICAL PROCEDURES, SUCH AS BY HOLDING RETRACTORS	97
G351 ASSIST SURGEONS IN APPLYING STERILE DRAPEs	97
G366 ESTABLISH STERILE FIELDS IN OR	97
G420 REMOVE LINEN, SPONGES, OR INSTRUMENTS FROM OPERATING AREAS	97
G350 ASSIST STERILE TEAM MEMBERS WITH DORNING OR REMOVING SURGICAL ATTIRE	96
G429 TRANSFER PATIENTS TO OR FROM OPERATING ROOM TABLES	96
G385 OPEN PAPER WRAPPED WRAPPERS OF STERILE SUPPLIES	96
G393 PERFORM CONTINUOUS COUNTS OF SPONGES, NEEDLES, AND INSTRUMENTS USED DURING OPERATIONS	95
G348 ARRANGE INSTRUMENTS, SPONGES, AND LINEN ON BACK TABLES	95
H434 ASSEMBLE INSTRUMENT SETS	95
G431 TRANSPORT PATIENTS TO AND FROM OR	95
G340 ADJUST MAYO STANDS	95
G361 CORRECT BREAKS IN STERILE TECHNIQUE BY MEMBERS OF OPERATING TEAMS	95
G362 DISPOSE OF STERILE GOWNS OR GLOVES	95
G392 PERFORM AS CIRCULATING TECHNICIAN IN SURGICAL SUITES	95
G442 ADJUST OVERHEAD OPERATING LIGHTS	94
G362 ASSIST SURGEONS IN DRESSING INCISIONS	94
H488 REMOVE AND DISPOSE OF SHARPS	94
H449 DISASSEMBLE OR EQUIPMENT AND INSTRUMENTS IN PREPARATION FOR CLEANING	94
H461 DISPOSE OF BLOODY SOILED ITEMS	94
G411 POSITION STERILE TABLES	93

TABLE A2

GROUP ID NUMBER AND TITLE: GRP069, ENT AND UROLOGY CLINIC PERSONNEL
 GROUP SIZE: 63 PERCENT OF SAMPLE: 7%
 AVERAGE GRADE: E-3, E-4, E-5, E-6 AVERAGE TICF: 65 MONTHS
 AVERAGE TAFMS: 99 MONTHS
 THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

<u>TASKS</u>	<u>PERCENT MEMBERS PERFORMING</u>
E187 SCHEDULE PATIENT APPOINTMENTS	98
G363 DON CAPS, MASKS, SCRUBSUITS, AND SHOE COVERS	97
G353 ASSIST SURGEONS WITH OPERATING ROOM (OR) SURGICAL PROCEDURES, SUCH AS BY HOLDING RETRACTORS	97
G361 ASSIST SURGEONS IN APPLYING STERILE DRAPES	97
E174 PERFORM PERIODIC INVENTORIES OF DATED MEDICATIONS TO DETERMINE CURRENCY	95
G367 HAND INSTRUMENTS TO OPERATING SURGEONS	95
G364 DON OR DOFF STERILE GOWNS OR GLOVES	95
G340 ADJUST MAYO STANDS	95
G352 ASSIST SURGEONS IN DRESSING INCISIONS	95
G348 ARRANGE INSTRUMENTS, SPONGES, AND LINEN ON BACK TABLES	95
G386 OPEN PEEL-PACKAGED STERILE SUPPLIES	95
G371 INSPECT EQUIPMENT FOR CLEANLINESS AND OPERATION	92
G368 HANDLE DRUGS AND SOLUTIONS	92
G350 ASSIST STERILE TEAM MEMBERS WITH DOWNING OR REMOVING SURGICAL ATTIRE	92
G412 PREPARE AND PASS INSTRUMENTS TO OPERATING SURGEONS	90
H480 REMOVE AND DISPOSE OF SHARPS	90
F190 ANSWER PATIENT MEDICAL INQUIRIES	90
F321 PREPARE STERILE SET-UPS FOR SURGICAL PROCEDURES	90
E117 EXPLAIN CLINICAL POLICIES TO PATIENTS	89
G385 OPEN PAPER WRAPPED WRAPPERS OF STERILE SUPPLIES	89
G391 PASS SURGERY SPECIMENS TO CIRCULATORS	89
E175 PERFORM PERIODIC INVENTORIES OF EQUIPMENT AND SUPPLIES, OTHER THAN DATED MEDICATIONS	89
I511 TAKE SPECIMENS TO LABORATORIES	89
G342 ADJUST OVERHEAD OPERATING LIGHTS	87
G426 SELECT SUPPLIES AND INSTRUMENTS FOR SURGERY	87
G414 PREPARE AND PASS SUTURE MATERIALS TO OPERATING SURGEONS	87
F335 SET UP AND ASSIST PHYSICIAN IN DIAGNOSTIC PROCEDURES	87
H481 REVIEW EXPIRATION DATES ON STERILE INSTRUMENTS, DISPOSABLE SUPPLIES, AND DRUGS	87
E172 ORDER SUPPLIES USING SHOPPING GUIDES	87
F262 CLEAN CLINIC EXAMINING AND TREATMENT ROOMS	87
G366 ESTABLISH STERILE FIELDS IN OR	87
G395 PERFORM HAND AND ARM SCRUBS	86

TABLE A3

GROUP ID NUMBER AND TITLE: GRP026, NCOIC SURGICAL SERVICES
 GROUP SIZE: 56 PERCENT OF SAMPLE: 6%
 AVERAGE GRADE: E-5, E-6, E-7 AVERAGE TICF: 138 MONTHS
 AVERAGE TAFMS: 168 MONTHS

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
B32 ORIENT NEWLY ASSIGNED PERSONNEL	96
C67 WRITE APR	96
B21 COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED MATTERS	96
A9 ESTABLISH WORK PRIORITIES	96
B22 DIRECT EQUIPMENT MAINTENANCE OR UTILIZATION	93
B33 PARTICIPATE IN STAFF MEETINGS	93
A3 DETERMINE REQUIREMENT FOR EQUIPMENT, SPACE, OR SUPPLIES	88
A13 PREPARE DAILY WORK SCHEDULES	88
B40 SUPERVISE SURGICAL SERVICE SPECIALISTS (AFSC 90252)	88
B20 CORRECT SAFETY HAZARDS	82
A1 ASSIGN PERSONNEL TO DUTY POSITIONS	80
B36 ROTATE DUTY ASSIGNMENTS OF PERSONNEL	79
B17 ADVISE SUBORDINATES ON MEDICAL ETHICS	77
A4 DEVELOP WORK METHODS	77
A16 SCHEDULE TDY, LEAVES, OR PASSES	77
A7 ESTABLISH PERFORMANCE STANDARDS	75
D77 COUNSEL TRAINEES ON TRAINING PROGRESS	75
E175 PERFORM PERIODIC INVENTORIES OF EQUIPMENT AND SUPPLIES, OTHER THAN DATED MEDICATIONS	75
B37 SUPERVISE APPRENTICE SURGICAL SERVICE SPECIALISTS (AFSC 90232)	73
D101 PARTICIPATE IN EMERGENCY MEDICAL TRAINING, SUCH AS FIRST AID OR CARDIOPULMONARY RESUSCITATION	73
C49 EVALUATE COMPLIANCE WITH WORK STANDARDS	71
C54 EVALUATE NEW EQUIPMENT	71
D87 EVALUATE PERSONNEL FOR TRAINING NEEDS	71
D98 MAKE ENTRIES ON AF FORMS 623 AND 623a (ON-THE-JOB TRAINING RECORD)	71

TABLE A4

GROUP ID NUMBER AND TITLE: GRP052, ORTHOPEDIC CLINIC PERSONNEL
 GROUP SIZE: 82 PERCENT OF SAMPLE: 9%
 AVERAGE GRADE: E-4, E-5, E-6 AVERAGE TICF: 82 MONTHS
 AVERAGE TAFMS: 116 MONTHS

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
F222 APPLY SHORT ARM PLASTER AND FIBERGLASS SPLINTS	100
F221 APPLY SHORT ARM PLASTER AND FIBERGLASS CASTS	100
F227 APPLY STANDARD LONG ARM PLASTER AND FIBERGLASS CASTS	99
F242 ASSIST DOCTOR IN TREATMENT OF FRACTURES	99
F224 APPLY SHORT LEG PLASTER AND FIBERGLASS CASTS	99
F329 REMOVE PLASTER AND FIBERGLASS SPLINTS	99
F328 REMOVE PLASTER AND FIBERGLASS CASTS	99
F207 APPLY LONG LEG CYLINDER PLASTER AND FIBERGLASS CASTS	99
F248 ASSIST DOCTOR IN TREATMENT OF SPRAINS, STRAINS AND CONTUSIONS	98
F255 BRIEF PATIENTS ON CAST CARE PROCEDURES	98
F225 APPLY SHORT LEG PLASTER AND FIBERGLASS SPLINTS	98
F228 APPLY STANDARD SHORT ARM PLASTER AND FIBERGLASS CASTS	98
F220 APPLY SHORT ARM NAVICULAR PLASTER AND FIBERGLASS CASTS	98
F243 ASSIST DOCTOR IN TREATMENT OF MUSCLE, TENDON, AND TENDON SHEATH INJURIES	98
F205 APPLY LONG ARM PLASTER AND FIBERGLASS SPLINTS	98
F330 REMOVE SKIN STAPLES	96
F223 APPLY SHORT ARM SUGAR TONG PLASTER AND FIBERGLASS SPLINTS	96
F208 APPLY LONG LEG PLASTER AND FIBERGLASS CASTS	96
F209 APPLY LONG LEG PLASTER AND FIBERGLASS SPLINTS	96
F258 CHANGE DRESSINGS	96
F206 APPLY LONG ARM SUGAR TONG PLASTER AND FIBERGLASS SPLINTS	94
F240 ASSIST DOCTOR IN TREATMENT OF DISLOCATIONS AND SUBLUXATIONS	94
E187 SCHEDULE PATIENT APPOINTMENTS	94
F204 APPLY LONG ARM NAVICULAR PLASTER AND FIBERGLASS CASTS	93
F317 PREPARE PATIENTS FOR REMOVAL OF PLASTER OR FIBERGLASS CASTS	91
F249 ASSIST DOCTOR IN TREATMENT OF TRAUMATIC JOINT AFFECTIONS	91
F202 APPLY LONG ARM CYLINDER PLASTER AND FIBERGLASS CASTS	90
F310 PREPARE CASTING MATERIAL	90
F203 APPLY LONG ARM HANGING PLASTER AND FIBERGLASS CASTS	89
F331 SCHEDULE PATIENTS FOR SURGERY	89

TABLE A5

GROUP ID NUMBER AND TITLE: GRP088, CLINIC NCOICS

GROUP SIZE: 5

PERCENT OF SAMPLE: 1%

AVERAGE GRADE: E-7

AVERAGE TICF: 154 MONTHS

AVERAGE TAFMS: 213 MONTHS

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
E187 SCHEDULE PATIENT APPOINTMENTS	100
E181 REVIEW AND SIGN CUSTODIAL ACTION LISTS (CAL)	100
A16 SCHEDULE TDY, LEAVES, OR PASSES	100
C56 EVALUATE QUALITY OF PATIENT CARE	100
E183 REVIEW AND SIGN USING ACTIVITY ISSUE/TURN IN LISTS	100
F323 REFER PATIENTS TO OTHER CLINICS	100
C47 EVALUATE CLINIC REQUIREMENTS FOR PERSONNEL AND EQUIPMENT	100
E182 REVIEW AND SIGN CUSTODIAL RECEIPT LOCATOR LISTS (CRLL)	100
E123 MAINTAIN PROPERTY CUSTODIAN LOG BOOKS	100
E176 PICK UP DAILY CLINIC ADMINISTRATIVE DISTRIBUTION	100
B21 COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED MATTERS	100
A3 DETERMINE REQUIREMENTS FOR EQUIPMENT, SPACE, OR SUPPLIES	100
B23 DIRECT MAINTENANCE OF ADMINISTRATIVE FILES	100
H464 ORDER PHARMACY SUPPLIES	100
H463 ORDER NONMEDICAL SUPPLIES USING LOCAL PURCHASE PROCEDURES	100
E117 EXPLAIN CLINICAL POLICIES TO PATIENTS	100
E151 MAKE ENTRIES ON SF FORMS 513 (MEDICAL RECORD - CONSULTATION SHEET)	100
E122 MAINTAIN DAILY CLINIC PATIENT LOGS	100
E172 ORDER SUPPLIES USING SHOPPING GUIDES	100
F332 SCREEN PATIENTS	100
E177 PREPARE AND SUBMIT DAILY PATIENT COUNT STATISTICS	100
F190 ANSWER PATIENT MEDICAL INQUIRIES	100
F331 SCHEDULE PATIENTS FOR SURGERY	100
E186 REVIEW SF FORMS 513 (MEDICAL RECORD-CONSULTATION SHEET)	100
E114 COORDINATE INTRA- OR INTERHOSPITAL APPOINTMENTS FOR OUTPATIENT CONSULTATIONS WITH OTHER MEDICAL FACILITIES	100
E174 PERFORM PERIODIC INVENTORIES OF DATED MEDICATIONS TO DETERMINE CURRENCY	100
E125 MAINTAIN SUPPLIES, OTHER THAN MEDICATIONS	100
I502 OBTAIN PATIENTS RECORDS	100
E185 REVIEW PATIENT MEDICAL RECORDS PRIOR TO APPOINTMENT	100
E175 PERFORM PERIODIC INVENTORIES OF EQUIPMENT AND SUPPLIES, OTHER THAN DATED MEDICATIONS	100
H478 PREPARE SHOPPING GUIDES	100

TABLE A6

GROUP ID NUMBER AND TITLE: GRP060, SURGICAL ENT PERSONNEL
 GROUP SIZE: 9 PERCENT OF SAMPLE: 1%
 AVERAGE GRADE: E-3, E-4 AVERAGE TICF: 38 MONTHS
 AVERAGE TAFMS: 59 MONTHS

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
G367 HAND INSTRUMENTS TO OPERATING SURGEONS	100
G363 DON CAPS, MASKS, SCRUBSUITS, AND SHOE COVERS	100
G340 ADJUST MAYO STANDS	100
G348 ARRANGE INSTRUMENTS, SPONGES, AND LINEN ON BACK TABLES	100
F287 PERFORM AIR CONDUCTION HEARING TESTS	100
F305 PERFORM TYMPANOMETRY	100
E187 SCHEDULE PATIENT APPOINTMENTS	100
E117 EXPLAIN CLINICAL POLICIES TO PATIENTS	100
G351 ASSIST SURGEONS IN APPLYING STERILE DRAPEs	89
G362 DISPOSE OF STERILE GOWNS OR GLOVES	89
G352 ASSIST SURGEONS IN DRESSING INCISIONS	89
F288 PERFORM BONE CONDUCTION TESTS	89
G364 DON OR DOFF STERILE GOWNS OR GLOVES	89
G391 PASS SURGERY SPECIMENS TO CIRCULATORS	89
G414 PREPARE AND PASS SUTURE MATERIALS TO OPERATING SURGEONS	89
G412 PREPARE AND PASS INSTRUMENTS TO OPERATING SURGEONS	89
G353 ASSIST SURGEONS WITH OPERATING ROOM (OR) SURGICAL PROCEDURES, SUCH AS BY HOLDING RETRACTORS	89
E177 PREPARE AND SUBMIT DAILY PATIENT COUNT STATISTICS	89
G366 ESTABLISH STERILE FIELDS IN OR	89
F320 PREPARE SPECIMENS FOR LABORATORY AND PATHOLOGY	78
E166 MAKE ENTRIES ON SF FORMS 551 (SEROLOGY)	78
G368 HANDLE DRUGS AND SOLUTIONS	78
E161 MAKE ENTRIES ON SF FORMS 546 (CHEMISTRY I)	78
F300 PERFORM SPEECH DISCRIMINATION TESTS	78
E167 MAKE ENTRIES ON SF FORMS 553 (MICROBIOLOGY I)	78
E165 MAKE ENTRIES ON SF FORMS 550 (URINALYSIS)	78
E164 MAKE ENTRIES ON SF FORMS 549 (HEMATOLOGY)	78
G395 PERFORM HAND AND ARM SCRUBS	78
F331 SCHEDULE PATIENTS FOR SURGERY	78
E170 MAKE ENTRIES ON SF FORMS 600 (HEALTH RECORD-CHRONOLOGICAL RECORD OF MEDICAL CARE)	78
F262 CLEAN CLINIC EXAMINING AND TREATMENT ROOMS	78
F301 PERFORM SPEECH RECEPTION THRESHHOLD (SRT) TESTS	78
F325 REMOVE FOREIGN BODIES FROM EARS USING ALLIGATOR FORCEPS	78
E121 MAINTAIN CLINIC FORMS LEVELS	67

TABLE A7

GROUP ID NUMBER AND TITLE: GRPO68, STERILE SUPPORT PERSONNEL
 GROUP SIZE: 16 PERCENT OF SAMPLE: 29
 AVERAGE GRADE: E-3, E-4, E-5 AVERAGE TICF: 57 MONTHS
 AVERAGE TAFTS: 62 MONTHS

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
H486 WRAP INSTRUMENT SETS FOR STERILIZATION	100
H473 PERFORM TERMINAL STERILIZATION OF INSTRUMENTS AND RELATED MATERIALS	100
H467 MONITOR STERILIZER EFFECTIVENESS USING THERMAL INDICATORS	100
H458 OPERATE STERILIZERS ACCORDING TO MANUFACTURERS INSTRUCTIONS	100
H448 DAMP DUST HORIZONTAL SURFACES, STERILE AND NONSTERILE STORAGE AREAS WITH GERMICIDES	94
H459 ORDER LINEN SUPPLIES	94
H446 CLEAN STEAM STERILIZERS	94
H472 PERFORM STERILIZATION OF ITEMS USED IN PATIENT CARE AREAS	94
H481 REVIEW EXPIRATION DATES ON STERILE INSTRUMENTS, DISPOSABLE SUPPLIES, AND DRUGS	88
H477 PREPARE LINENS AND INSTRUMENTS FOR STERILIZATION AND DISINFECTION	88
H456 MONITOR STERILIZER EFFECTIVENESS USING BIOLOGICAL INDICATORS	88
H455 MAKE SUPPLY DELIVERIES FROM CENTRAL SUPPLY TO USING UNITS	81
H433 ASSEMBLE IN-HOUSE SPECIALTY SETS	81
H444 CLEAN ETO STERILIZERS	81
H482 STORE COMMERCIAL NONSTERILIZED OR PRESTERILIZED ITEMS	81
H452 INSPECT AND REPLACE SURGICAL INSTRUMENTS AS REQUIRED	75
H484 STORE LOCALLY CLEANED, DISINFECTED, OR STERILIZED ITEMS	75
H434 ASSEMBLE INSTRUMENT SETS	75
H436 CHANGE AGENT TANKS ON ETHYLENE OXIDE (ETO) STERILIZERS	75

TABLE A8

GROUP ID NUMBER AND TITLE: GRP034, MCOIC SUPPLY

GROUP SIZE: 16

PERCENT OF SAMPLE: 7%

AVERAGE GRADE: E-3, E-4, E-5

AVERAGE TICF: 57 MONTHS

AVERAGE TAFMS: 62 MONTHS

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
H461 ORDER MEDICAL SUPPLIES USING LOCAL PURCHASE PROCEDURES	100
H460 ORDER MEDICAL SUPPLIES FROM USAF SUPPLY AGENCIES	100
H462 ORDER NONMEDICAL SUPPLIES FROM USAF SUPPLY CATALOGS	100
E172 ORDER SUPPLIES USING SHOPPING GUIDES	91
H478 PREPARE SHOPPING GUIDES	91
E179 RESEARCH SUPPLY CATALOGS	82
E126 MAINTAIN SUPPLIES, OTHER THAN MEDICATIONS	82
E142 MAKE ENTRIES ON DD FORMS 1348-6 (DOD SINGLE LINE ITEM REQUISITION SYSTEM DOCUMENT - MANUAL)	82
E176 PERFORM PERIODIC INVENTORIES OF EQUIPMENT AND SUPPLIES, OTHER THAN DATED MEDICATIONS	82
H463 ORDER NONMEDICAL SUPPLIES USING LOCAL PURCHASE PROCEDURES	82
C67 WRITE APR	73
A3 DETERMINE REQUIREMENT FOR EQUIPMENT, SPACE, OR SUPPLIES	73
E183 REVIEW AND SIGN USING ACTIVITY ISSUE/TURN IN LISTS	73
E115 COORDINATE SPECIAL EQUIPMENT PURCHASES WITH MEDICAL MATERIEL OR VENDORS	64
B21 COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED MATTERS	55
B40 SUPERVISE SURGICAL SERVICE SPECIALISTS (AFSC 90252)	55
H482 STORE COMMERCIAL NONSTERILIZED OR PRESTERILIZED ITEMS	55
H474 PICK UP AND DELIVER SUPPLIES	55
E116 COORDINATE STANDARD MEDICAL SUPPLY PURCHASES WITH MEDICAL MATERIEL OR VENDORS	55
G382 OBTAIN EQUIPMENT AND SUPPLIES FOR SURGERY	45
H481 REVIEW EXPIRATION DATES ON STERILE INSTRUMENTS, DISPOSABLE SUPPLIES, AND DRUGS	45
D101 PARTICIPATE IN EMERGENCY MEDICAL TRAINING, SUCH AS FIRST AID OR CARDIOPULMONARY RESUSCITATION	45
C54 EVALUATE NEW EQUIPMENT	45
E139 MAKE ENTRIES ON AF FORMS 601 (EQUIPMENT ACTION REQUEST)	45
E188 TYPE CORRESPONDENCE OR REPORTS	45
E123 MAINTAIN PROPERTY CUSTODIAN LOG BOOKS	36
B33 PARTICIPATE IN STAFF MEETINGS	36
D98 MAKE ENTRIES ON AF FORMS 623 AND 623a (ON-THE-JOB TRAINING RECORD)	36

END
DATE
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